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ABSTRACT

A procedure was developed and evaluated for assessing the self-perceived educational needs of people as one input to the process of planning, approving, and implementing relevant educational programs. The method of data collection involved selecting samples of people by randomly selecting households in a given geographic area, and then contacting the residents of selected households to obtain an assessment of their job training needs. Contact with the households was made through three mailings and a telephone followup. The questionnaire which was used focused on collecting the following kinds of information: (1) Characteristics of those wanting additional training (e.g., age, sex, location, employment status), (2) type of training interest (e.g., secretarial, electronics, welding), (3) why training was needed (e.g., prepare for a first job, prepare for a job change), (4) time when a program can be attended (e.g., days, nights, weekends), and (5) barriers to attending an educational program (e.g., family obligations, lack of transportation). A random sample of 3,606 households in a nine-county area of Minnesota were selected and contacted with 63% response. Validity and reliability of questionnaire responses were evaluated. Total cost at the field site amounted to approximately $3.00 per household surveyed, or about 16 minutes of staff time per household. Major findings for the field site were that about 11% of residents over high school age and 85% of high school seniors perceived that they needed additional job training. Complete findings are included in the report along with the questionnaire and cover letters. (HL)

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People's Need for Additional Job Training: Development and Evaluation of an Assessment Procedure

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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2

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PREFACE

The "needs of the consumer" are important in planning and producing goods and services in a market economy such as we have in the United States. In the case of job training services, the consumer is the potential student and "needs" concern types of training and its accessibility. One producer of job training services is the prime sponsor under the auspices of the Comprehensive Employment and Training Act of 1973. Other producers are the many public and private educational institutions as well as business and industry. The purpose of this study was to further develop and evaluate a procedure to obtain information about the "needs of consumers" of job training services.

Toward this end, many persons were helpful. Special thanks go to the persons involved at the project demonstration site: John Sem, Executive Director and William Scharff, Manpower Planner for the West Central Economic Development Commission; Karen Peterson, Site Project Director and Rhona Nitz, Site Project Secretary. Without their interest, enthusiasm, attention to detail, and commitment to purpose, the project would not have succeeded. Acknowledgement is due members of Western Minnesota Consortium of Education Institutions for their critical and astute advice during development of the data collection questionnaire; and our Project Offices at the Governor's Manpower Office, Barbara Homce and later, Tom Nordlund, for their technical assistance and patience on project status reports. To Kris Sockness, our secretary, a special thanks for typing more drafts of this and related reports than she would care to remember. Appropriately, in a study with this title, we thank the people in West Central Minnesota who took of their time to complete our questionnaires.

ABSTRACT

Information obtained from assessing the self-perceived educational needs of people is one input to the process of planning, approving, and implementing relevant educational programs which can be conveniently attended by interested individuals. The problem addressed in this report was the further development and evaluation of a procedure which would produce this information in an accurate and efficient manner.

Accuracy was ensured by the method of data collection, and a questionnaire design which elicited information in a valid and reliable manner. The method of data collection involved selecting a sample of people by randomly selecting households in a given geographic area, and then contacting the residents of selected households to obtain an assessment of their job training needs. Contact with the households was made through three mailings and a telephone follow-up. The questionnaire which was used focused on collecting the following kinds of information: (1) characteristics of those wanting additional training (e.g., age, sex, location, employment status), (2) type of training of interest (e.g., secretarial, electronics, welding), (3) why training was needed (e.g., prepare for a first job, prepare for a job change), (4) time when a program can be attended (e.g., days, nights, weekends), and (5) barriers to attending an educational program (e.g., family obligations, lack of transportation).

The method of data collection and questionnaires were evaluated by field testing in the West Central Economic Development Region of Minnesota, a nine county area. A random sample of 3,606 households was selected and contacted. Sixty-three percent of the residents of these households responded to the data collection procedure. Comparison of sample to the population in terms of general characteristics (e.g., age, sex, employment status) showed that the sample was fairly representative of the population.

Validity and reliability of questionnaire responses were evaluated during the study. Examination of validity showed that the modal level of interest in job training programs which were perceived as a first choice in terms of need, was the willingness of respondents to be sent information about available courses and programs. Reliability of responses was checked by recontacting a sub-sample of the respondents after three months. Results obtained revealed that 80 percent of the responses to major questions on the questionnaire were the same after three months. This indicated a fairly high reliability for the short run. The questionnaire was also used with a sample of 547 high school seniors in the selected geographic area.

Major findings for the field site, the West Central Economic Development Region of Minnesota, were that about 11 percent of the residents over high school age and 85 percent of high school seniors perceived that they needed additional job training. For residents over high school age, the most frequent reasons given for additional job training needs were retraining for a different, unrelated job; preparing for a promotion; and updating to do better at or keep a present job. Most frequent reasons given by high school seniors were preparation for a first job and retraining for a different, unrelated job. All occupational areas were represented in the types of training which was perceived to be needed; there was much similarity between the types of training needed by residents over high school age and high school seniors. Categories of occupations with the most frequent response were office and accounting, health, public service, and for residents over high school age, agriculture. Night was the most convenient time to attend job training programs for both groups. Most frequent barriers to attending programs for residents over high school age were a time-consuming job, program not available in local area, family obligations, and program not available at a convenient time. For high school seniors, the most frequent barriers to attending were the cost of training, a time-consuming job, program not available in local area, and not being informed about programs being offered and not knowing where to find out. Fourty-four percent of high school seniors indicated they would like help in deciding what type of further education they needed.

The efficiency of the assessment procedure was evaluated by keeping a record of costs, time requirements, and problems incurred in the field implementation. Total cost at the field site amounted to approximately $3.00 per household surveyed. Time, a way of looking at cost from a staffing perspective, amounted to about 16 minutes per household. After reviewing the results of the field evaluation of the procedure, revisions have been made, and a detailed Handbook describing the assessment procedures was prepared for use in future studies of the perceived needs of people for additional job training.

TABLE OF CONTENTS

PREFACE i

ABSTRACT ii

CHAPTER I. PEOPLE'S NEED FOR ADDITIONAL JOB TRAINING. . . 1
Major Questions 1
Uses and Users of Information 3
Limitations of Information. 4
Proposed Project Purpose and Activities 5

CHAPTER II. PROCEDURE USED. 10
Selecting Project Site. 10
Assigning Project Responsibilities. 14
Developing Data Collection Forms. 15
Collecting the Data 25
Training and Monitoring 30
Evaluating Assessment Procedure 31

CHAPTER III. RESULTS OF ASSESSMENT. 32
Summary Tables for Residents Over High School Age in Region 4 32
Summary Tables for High School Seniors in Region 4. 50
Results of Procedural Evaluation. 50

CHAPTER IV. CONCLUSIONS 75
Peoples' Need for Additional Education in Economic Development Region 4 75
Assessment Procedure. 78

APPENDIX I. SCHEDULE OF PROJECT ACTIVITIES. 81

APPENDIX II. LETTER OF INVITATION TO POTENTIAL PROJECT SITES. 85

APPENDIX III. PROJECT SITE SELECTION ADVISORY COMMITTEE 89

APPENDIX IV. LETTER OF INTEREST IN BEING PROJECT SITE 91

APPENDIX V. ADVISORY GROUP FOR QUESTIONNAIRE DEVELOPMENT 94

APPENDIX VI. COUNTY DISTRIBUTION OF SAMPLE HIGH SCHOOL SENIORS AND HOUSEHOLDS. 96

APPENDIX VII. QUESTIONNAIRE AND COVER LETTERS. 98

APPENDIX VIII. EXPLANATION OF SUMMARY TABLES 104

APPENDIX IX. VALIDITY QUESTIONNAIRE AND COVER LETTER. 110

APPENDIX X. RELIABILITY OF POPULATION ESTIMATES. 113

CHAPTER I

PEOPLE'S NEED FOR ADDITIONAL JOB TRAINING

Those responsible for providing educational programs designed to prepare people for work face the typical questions of what, how much, when, and where. In answering these questions, they consider past experiences and "best guesses" about the future. Consideration is given to what "could" be done and what "should" be done, but eventually they must decide what "will" be done. Many factors enter the decision making process such as: (1) what are the demands of industry for trained workers, (2) what are the interests of people for job training, (3) what are the types of training programs which can be provided legally by particular funding agencies (e.g., states under federal vocational education legislation, prime sponsors under the Comprehensive Education and Training Act), (4) what training programs can be provided more effectively than from alternative sources, (5) what is the quality of the training program which can be offered, (6) how accessible is the training program in terms of providing equal opportunity, and (7) is the training program efficient.

The purpose of this assessment was to obtain information about one of these factors -- the interests of people for job training beyond high school. The importance of this factor stems from its being the "wishes of the consumer" in the market place for educational services. It is information about the perceived needs of the buyer of job training services. True, it is only one of several types of information which enters the educational decision making process; but it is information which cannot be ignored in a quest for relevance, use (i.e., enrollment), and comprehensiveness of service.

MAJOR QUESTIONS

What are the major dimensions or ways of characterizing the perceived needs of people for job training? The answer should relate to how the information will be used. A major dichotomy in use appears to be in deciding what job training services are needed and in deciding how the services are to be offered.

Deciding what services are needed requires information about why training is needed (e.g., to prepare for a first job,

to prepare for job advancement or promotion); the particular type of training desired (e.g., secretarial, welding, agricultural production), and how many individuals want the training. The importance of the first two categories of information rests on the assumption and general practice that different training programs are indeed needed, designed, and offered for individuals with different combinations of responses to the "why" and "what type" questions. For example, the program to prepare individuals for a first job as a secretary is usually different from a program to prepare individuals to be promoted or advanced to be a secretary. The difference is not always in content but may be in length, depth, or mode of delivery. The question of how many want the service has direct implications for the priority of the program relative to other programs.

The question of how to deliver job training services prompts questions about when training can be attended, where can training be attended, special barriers to attendance, and other characteristics of the consumer such as age and employment status. Answers to when training can be attended (e.g., days, nights, weekends) have implications for when services should be scheduled so as to be accessible. Information about where programs can be attended can be determined from responses to questions of present location and distance willing to travel. Knowledge of special barriers to participating in job training services is particularly useful in deciding how or under what conditions services will be offered. Barriers may involve concerns such as lack of child care and transportation services, insufficient resources to pay tuition, or inadequate knowledge of what programs are available. These concerns may imply the need for services beyond just job training such as child care, transportation facilities, counseling and guidance services, and financial assistance. Without these additional services, the programs are really not accessible to some people for reasons beyond their control.

In summary, the major questions to be answered about the perceived needs of people for additional job training in providing services to meet these needs are:

1. Why is training needed (e.g., prepare for first job)?

2. What type of training is needed (e.g., welding)?

3. How many want the training?

4. When could training be attended?

5. Where could training be attended?

6. What are special barriers to attendance?

7. What are the characteristics of people to be served (e.g., age, employment status)?

USERS AND USES OF INFORMATION

Three major uses of information on the perceived needs of people for job training are in the functions of planning, approving, and implementing job training programs. These functions are often carried out by different groups of individuals. Planners need the information in defining the full array of alternative programs which are needed. Further, they can use the information in defining the alternative programs (e.g., what are the characteristics of a "program", how are the needs sub-divided into mutually exclusive and exhausive parts). Planners must define programs in order to array them and estimate how the programs can be accomplished and how much they will cost. As already mentioned, the information about perceived needs can be used in deciding "how" to deliver the program and, thereby, estimate its likely costs. Information on how many want the program also has implications for cost. The planners, as thought of here, are those who staff state departments of education, prime sponsor agencies, economic development commissions, and administrators in local educational agencies (e.g., area vocational-technical institutes, secondary schools, community colleges, universities).

The second group of users is the group whose function is to approve job training programs. They use the information to set priorities among the array of alternative programs. In this function, priorities are weighed against resources and "go/no go" decisions are made. The information on perceived needs of people for various programs can be used as indicators of relevance and prospective utilization. The approvers are concerned with the "value" of the program and its cost. Several factors are important in determining "value", and one is the "acceptance" of the program by those who are to benefit from it. Perceived needs of potential consumers can be used as a measure of acceptance. The "approvers" are those who are

members of the legislature, executive and judicial branches of government; members of school boards, college and university boards, state boards, and economic development commissions.

The third group of users is the group whose function is the implementation of job training services. Their job is to decide specifically how the programs are to be operated and to operate and manage them. The decision of how to implement is uniquely characteristic to each different situation in terms of time, place, and the individuals involved. "Implementers" can use the information in deciding how to make the programs accessible and relevant to potential participants. The concern is with selecting the right time, place, subject matter, and instructor. Perhaps the use of the information on the perceived needs of people for additional job training is more tenuous for this function than for the two previously described. The reason is not that the information itself is of less use, but that there are many other types of information which may be equally important (e.g., what facilities are available, quality of instructor available, how many students will actually show up, fit with programs offered in the recent past). The "implementers" are usually the instructors and their immediate supervisors (e.g., department heads in educational agencies, directors of continuing education programs).

LIMITATIONS OF INFORMATION

Before going further, the information on the self-perceived needs of people for additional job training must be put in perspecitve. The following list of limitations is intended as "consumer protection information" for those contemplating the use of the needs assessment information.

1. The information provided is a self-perception of need; it depends on the current knowledge and understanding of the respondent concerning his need for additional job training, the specific type of job training of interest, and the benefits to be obtained by attending a training program.

2. The intensity of perceived need is a measure of expected utility for which there is no common scale which can be applied uniformly to and by each respondent. Only ordinal

measurement and analysis are possible without major assumptions.

3. The need as previously stated, is only perceived. Certainly, there may be individuals in the population who "need" job training but do not recognize this need for one of several reasons (e.g., don't know the benefit, are not aware of their problem).

4. Perceived need is a measure of interest in a particular kind of additional job training and does not mean the individual would always actually enroll or attend if the program were offered.

5. The procedure advocated involves a sample of the population of an area at a given time of year in a particular year. Depending on sample size relative to population size, an error of estimate is expected. Also, relative to time of measurement, variations are expected in perceived needs depending on season and year.

6. The information on perceived needs of people is most useful in conjunction with other equally important information (e.g., demands of industry, program efficiency, program quality). If this other information is not available at the same time, the usefulness of the perceived need for job training may be hampered.

PROPOSED PROJECT PURPOSE AND ACTIVITIES

The purpose of the Comprenensive Education and Training Act is to "provide job training . . . for economically disadvantaged, unemployed, and underemployed persons. . ."[1] The system to provide such training was to be flexible and decentralized. The planning and operating unit is to be a "prime sponsor" which has responsibility to submit a compreh-

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[1]United States Congress. "Comprehensive Employment and Training Act of 1973". Public Law 93-203, December 28, 1973, p. 1.

sive manpower plan for a specified geographic area. Each prime sponsor has a "planning council" which is to "submit recommendations regarding program plans . . . and to provide for continuous analysis of needs for employment, training, and related services."[2] The above provisions of the legislation indicate an emphasis on providing occupational training and related services to meet the needs of special groups of people. Prime sponsors are charged with identifying these groups of people in terms of their size, special employment related problems, and how they might best be served -- this information would seem to be a critical input into developing a viable plan of activities. Information of this nature is required to set priorities and tailor programs and services to the needs of the clientele to be served. The problem is to develop a procedure which will produce the above information in an accurate, reliable, and efficient manner.

Project Purpose

The purpose of the project described in this report was to develop and pilot test a procedure to determine the perceived need of residents of a prime sponsor geographic area (or subarea) for additional job training and related services. Information to be gathered was to include (but not necessarily be limited to): (1) type of training of interest (e.g., secretarial, electronics, welding), (2) why the training is needed (e.g., prepare for a first job, prepare for a job change, reenter a job similar to one held in past, prepare for job advancement, or prepare to do better at or keep present job), (3) when a training program could be attended (e.g., days, nights, weekends), and (4) characteristics of those wanting additional training (e.g., age, sex, location, employment status). Additional information of use was to be identified in consultation with the selected prime sponsor's staff and planning council. Such information might include barriers and special handicaps to attending job training. The primary intent was to develop an information base about the perceived job training needs of residents of a given geographic area as one of the kinds of information to be used in planning a comprehensive employment training program for an area.

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[2] Ibid. United States Congress. "Comprehensive Employment and Training Act of 1973", p. 5.

Information was to be collected using a mailed questionnaire and telephone follow-up to a random sample of residents in the prime sponsor area. The output of the project was to be a report summarizing the results from the sample with generalizations to the appropriate total group in the prime sponsor area and a detailed description and evaluation of the procedures used to collect and analyze the data. The procedure proposed had been pilot tested in Steele County, Minnesota[3] and successfully used in South St. Paul[4] and Minneapolis.[5] In the later two cases, the information was used to determine the need for, and to facilitate programing of proposed post-secondary area vocational-technical institutes.

Project activities were to be planned and implemented in cooperation and consultation with the staff of the selected prime sponsor (or sub-area). Preference was to be given to selecting a prime sponsor from rural Minnesota since some data was already available for a metropolitan area (from the Minneapolis study). If the information collected proved useful, it was anticipated that the data collection procedure and instruments as well as technical assistance would be available to other prime sponsors in the future.

Project Goals

The specific goals of the project were to develop and pilot test a procedure to provide the following kinds of information for a prime sponsor area (or sub-area):

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[3]Copa, George, Edgar Persons, and Paul Thomas. Individual Demand for Vocational Education: Structure and Determination. Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota: Minneapolis, February, 1973.

[4]Thomas, Paul. Method to Determine the Vocational Education Needs of Adults in South St. Paul, Minneosta. Ed.D. Dissertation, University of Minnesota: Minneapolis, 1974.

[5]Minneapolis Public Schools and Minnesota Research Coordinating Unit for Vocational Education. A Study to Assess Minneapolis Residents Perceived Needs for Job Training. Minneapolis Public Schools: Minneapolis, 1974.

1. Size of group interested in additional job training.

2. Characteristics of group interested in additional job training.

3. Reason for interest in additional job training (e.g., preparation for first job, job change, re-enter labor force, update, upgrade).

4. Mix of programs desired in terms of specific occupational areas.

5. Time of day or days of week when job training could be conveniently attended.

A limited amount of additional information could be gathered; this information was to be identified in cooperation with a selected prime sponsor. The procedure was to be developed and pilot tested with a selected prime sponsor (or sub-area) in Minnesota. Specifications for the procedure were that it produced the desired information with validity, reliability, and efficiency.

Project Activities

Major steps in the project were to be:

1. Identify a prime sponsor (or sub-area) interested in cooperating to do the proposed project and use the information collected.

2. Define the group of residents of interest (to include all or part of a geographic area falling under the jurisdiction of one prime sponsor).

3. Select a random sample of households (to include about 3,500 households depending on population size and cost of data collection).

4. Review previously developed questionnaires with prime sponsor and revise as necessary to collect needed information.

5. Collect data through use of two mailings and follow-up telephone calls.

6. Summarize data using a computer program available at the University of Minnesota.

7. Meet with prime sponsor staff to interpret results as necessary and determine ways of improving procedure.

8. Publish and disseminate report of project for use by all prime sponsors (i.e., describing procedure, results, interpretations, cost).

Steps 3 and 5 were to be done at the site of the prime sponsor office using local staff.

CHAPTER II

PROCEDURE USED

The procedure used to carry out the proposed project purpose and activities is described in this chapter. Major headings deal with selecting the project site, assigning project responsibilities, developing the data collection forms, collecting the data, and the training for and monitoring of the project. A brief schedule of project activities is shown in Appendix I.

SELECTING PROJECT SITE

Basic guidelines in selecting a project site in Minnesota were taken from the project's proposed purpose and activities. Together with staff from the Governor's Manpower Office[6] a procedure and set of criteria for selecting the project site were developed with the objective of maximizing the potential for project success. The procedure agreed upon was to use the Minnesota Economic Development Regions as the potential geographic areas from which to select a project site area. Economic Development Regions were used because: (1) They generally represent prime sponsor areas or sub-areas, (2) they have the potential to have staff personnel with responsibility for human resource development, and (3) much base data (e.g., population characteristics, geographic characteristics) already exists for these areas.

The criteria developed for use to select the project site and the justification for each are as follows:

Criteria	Justification
1. Represent a rural area (i.e., population density less than 100 persons per square mile)	--Preference for a prime sponsor from a rural area of Minnesota was specified in the approved Project Application to Governor's Manpower Office.

[6]Ms. Barbara Homce served as the Project Officer during this time and provided much technical assitance.

Criteria	Justification
	--Information about the procedures, workability, and data generated was already available for a large metropolitan area (from Minneapolis study).
2. Population of geographic area under 200,000.	--Need to obtain sufficient sampling intensity for valid generalization to population of area. --Funding limited to contact of about 3,500 households based on cost of data collection.
3. Base descriptive data available on population of the geographic area (e.g., size of population, age distribution, income, sex, occupation held, number of households).	--Need accurate base data to validate sample and to generalize to full population.
4. Geographic area is a prime sponsor or subregion (i.e., has manpower planning council or manpower advisory committee, does planning as an entity).	--Procedure being developed is to be feasible and useful in providing information to do planning and support a plan.
5. Ability to provide assistance to project (i.e., manpower planner available, can assist in hiring a project director and secretarial assistant, willing to share responsibility for management of project, can house project staff, access to manpower planning/advisory committee).	--Success of project will depend on cooperation and support at local prime sponsor level.
6. Have interest in and can benefit from the outputs of the project (i.e.,	--Success of project again depended on local involvement and their view of potential benefits.

Criteria	Justification

really want to do project, and can see immediate uses of data).

Using these criteria, the following procedure was used:

1. Base data was developed on each economic development region (see Table 1). Region 11 was eliminated by use of Criteria 1, above, concerning population density.

2. Using Criteria 2, above, concerning population size, Regions 3, 7W, 8, 9, and 10 were eliminated from further consideration.

3. Using criteria 5, above, concerning availability of manpower planner, Regions 6E, 6W, and 7E were eliminated.

4. The above steps left Regions 1, 2, 4, and 5 as potential project sites. At this point, a letter was sent to the Director of the Economic Development Commission for each of these four regions asking for a "Letter of Interest" in being a project site, and explaining how they could meet each of the selection criteria, particularly criteria 4, 5, and 6. A copy of the letter of invitation is shown in Appendix II.

5. "Letters of Interest" were received from each of the four pre-selected economic development regions. Region 2 later gave its support to either Region 4 of 5. A site selection advisory committee was then formulated to advise on selection of a project site from among Regions 1, 4, and 5. The committee was composed of one representative from each of the following: Governor's Manpower Council, a Prime Sponsor, Governor's Manpower Office, Minnesota Research Coordinating Unit for Vocational Education. A list of members and their positions is shown in Appendix III. After they reviewed the selection criteria, an additional critiera was added--that the area be representative of rural areas in Minnesota (e.g., in

terms of size of population centers, rural and urban population mix). After reviewing the "Letters of Interest" from each region, they recommended the selection of Region 4 as the project site. This recommendation was accepted. A copy of the "Letter of Interest" submitted by Region 4 or the West Central Region is shown in Appendix IV.

6. A visit was made to Region 4 to meet with Economic Development Commission staff to explain the project responsibilities and activities. The West Central Economic Development Commission subsequently voted to accept the project and a sub-contract was negotiated.

TABLE 1

POPULATION SIZE AND DENSITY OF
MINNESOTA ECONOMIC DEVELOPMENT REGIONS

DEVELOPMENT REGION	POPULATION	AREA SQ. MILES	DENSITY (PEOPLE/ SQ. MILES)
1	94,579	8,551	11.0
2	54,594	7,456	7.3
3[a]	329,873	20,338	16.2
4	185,376	8,671	21.3
5	113,624	6,267	18.0
6E	98,159	3,001	32.7
6W	61,809	3,427	18.0
7E[b]	76,351	3,540	21.6
7W[c]	173,518	2,983	58.0
8	141,532	5,902	24.0
9	218,077	5,266	41.4
10	383,369	6,908	55.5
11	1,874,110	3,018	621.0

ASSIGNING PROJECT RESPONSIBILITIES

After site selection was completed, a meeting at the site was held to discuss staffing, needed facilities, project responsibilities, and scheduling. The project called for a site project director and secretarial assistance. A description of the duties and qualifications of the site staff are shown in Exhibit 1 and 2[7]. The site project director and secretarial assistant were to be employed one-half time for a period of approximately six months.

After discussion of project responsibilities, the division of responsibilities between the project site and the Minnesota Research Coordinating Unit for Vocational Education (RCU) was decided as shown in Table 2. A schedule of project activities by month and day was then developed. The resulting schedule of activities is shown in Appendix I.

TABLE 2

DIVISION OF PROJECT RESPONSIBILITIES

RESEARCH COORDINATING UNIT	PILOT SITE
Identify prime sponsor (or sub-area) interested in cooperating and using information	Supply space and equipment for project
Provide training in procedures	Hire project site director and secretarial assistance
Develop and print questionnaire	Public communications for project
Develop computer program to summarize data	Define group to be sampled
Keypunch and analyze data -- prepare summary tables	Select sample
Cooperate in writing final report	Write cover letter
Meet with staff and committee to assist in interpreting report	Assist in reviewing questionnaire (staff and committee)
Write and disseminate report to all prime sponsors and other interested parties (i.e., pro-	Collect data -- mailing/telephone
	Code questionnaires
	Evaluate procedures
	Keep cost and time records

[7]These positions were later filled by Karen Peterson and Rhona Nitz, respectively.

TABLE 2 (continued)

RESEARCH COORDINATING UNIT	PILOT SITE
cedures, results, interpretations, cost)	
Monitor and trouble-shoot during project	
Pay costs to do project (excluding space and equipment costs)	

DEVELOPING DATA COLLECTION FORMS

Meetings were first held with the Economic Development Commission staff to identify the types of data to be collected from the population to be sampled. Later, a committee composed of representatives of the educational institutions and agencies in Region 4 was used to review sample questions and refine the final form of the questionnaire. A list with the names and positions of individuals serving on this committee is shown in Appendix V. Upon recommendation of this committee, it was decided to include questions about interest in more education for hobbies and special interests as well as job training.

In general, the questionnaire was designed to answer the following major questions:

1. Why is training needed (e.g., prepare for first job)?
2. What type of training is needed (e.g., welding)?
3. How many want the training?
4. When could training be attended?
5. Where could training be attended?
6. What are special barriers to attendance?
7. What are the characteristics of people to be served (e.g., age, employment status)?

EXHIBIT 1

JOB DESCRIPTION FOR SITE DIRECTOR

POSITION: Site Director, Project People's Need for Additional Job Training

JOB DUTIES:

1. Responsible for overall planning and operation of the study at the pilot site.

2. Inform the public in the area about the when, where, and why of the study.

3. Communicate the purpose of the study to key individuals in the area (e.g., school boards, government officials, teachers, advisory committees).

4. Identify individuals and obtain directories that will be helpful in securing names and addresses of sample.

5. Secure detailed recent maps of the geographic area to be studied.

6. Organize office personnel and equipment to carry out sample selection, questionnaire mailing and collection, and questionnaire coding and preparation for computer analysis.

QUALIFICATIONS REQUIRED:

1. Knowledgeable of area (e.g., people, organizations, geography).

2. Experienced at supervising and conducting surveys.

3. Ability to plan and follow-through on details.

4. Ability to do communications and represent the project with key area people and organizations.

EXHIBIT 2

JOB DESCRIPTION FOR SECRETARIAL ASSISTANCE

POSITION: Secretary, Project People's Need For Additional Job Training

JOB DUTIES:

1. Type correspondence and communications for project.
2. Select sample and obtain addresses.
3. Set up and maintain filing system for project.
4. Code, prepare, and mail questionnaires.
5. Follow-up non-respondents with mailings and telephone calls.
6. Code returned questionnaires.

JOB QUALIFICATIONS:

1. Ability to type and file.
2. Communication skills on telephone.
3. Accurate and persistent in attention to procedures.
4. Knowledgeable of area (e.g., people, organizations, geography).
5. Able to work late afternoons, evenings, and weekends when necessary.

The questionnaire will be described in sections relating to each of these questions; a complete questionnaire is shown in Appendix VII.

General Characteristics of Population

Starting first with the last question, concerning general characteristics of the population, the relevant section of the questionnaire is shown as Exhibit 3. Information on general characteristics serve at least two major purposes. First, it provides information to check how well the sample of respondents matches the population from which the sample was drawn. For example, using the information shown on the questionnaire in Exhibit 3, the sample of respondents can be described in terms of their age, sex, and employment status, and then compared to existing data of this kind about the full population being studied. These factors are all related to likely biases the sample might have regarding the desired amount and type of further education, particularily for job preparation.

Second, the general characteristics information provides a means for sub-dividing the data on groups of special interests (e.g., males, age 24-30, unemployed, retired). In this way,

EXHIBIT 3

GENERAL CHARACTERISTICS INFORMATION

A. What is your age?_____years (11-12)

B. What is your sex?_____male_____female (13)

C. If you are working at present, what is your job?_____ [ ][ ]
(For example: teacher, farmer, secretary, homemaker) (14-16)

If you are not working at present or are working less time than desired, what is the reason? Check all that apply.

_____ 1. In school (17)

_____ 2. Retired (18)

_____ 3. Cannot find more work (19)

_____ 4. Do not want more work (20)

_____ 5. Other reason, explain:_____ (21)

the usefulness of the data is increased many fold for use in planning educational programs to meet the needs of specific groups of individuals. Note that for this section of the questionnaire and other sections, provisions have been made for necessary coding of the questionnaires and direct transfer of information via key punch unto computer cards (i.e., see the numbered boxes on the questionnaire).

Why Training Is Needed

As shown in Exhibits 4 and 5, the questionnaire is divided into two basic sections, one dealing with interest in more education for hobbies and special interests and the other with more education for job training. In each case, respondents are

EXHIBIT 4

WHY MORE EDUCATION IS OF INTEREST FOR HOBBIES OR SPECIAL INTERESTS

D. Do you want more education for hobbies or special interests for any of the following reasons? Check the one most important reason or check "do not want." (22)

_____ 1. Better use of my leisure time.

_____ 2. Save money by doing it myself.

_____ 3. General self-improvement.

_____ 4. Do not want more education for hobbies or special interests (skip question E, go to F).

EXHIBIT 5

WHY MORE EDUCATION IS OF INTEREST FOR JOB TRAINING

F. Do you want more job or employment related training for any of the following reasons? Check the one most important reason or check "do not want."

_____ 1. Prepare for my first job.

_____ 2. Prepare for a job which is unrelated to a job I have or have had. (29)

_____ 3. Prepare to re-enter a job similar to one I had in the past.

_____ 4. Prepare for a job promotion or advancement.

_____ 5. Prepare to do better at or keep my present job.

_____ 6. Prepare for certification, recertification, or licensing.

_____ 7. Do not want more job or employment related training (skip Question G, go to I).

given the opportunity to review and indicate why they are interested in more education. The responses are designed to make the respondent aware of the purpose of educational programs, and thereby suggest potential benefits to the respondent. It is also important to know the respondent's purpose for participating when designing educational programs. For example, the program designed to help a person to do better or keep their present job may be very different than one designed to help a person to initially prepare for the same job. These two programs not only require differences in content, but may well be different in length, time schedule, location, cost, and entry requirements. The question of "why" is asked before the respondent is asked "what" kind of program is desired because it seems to be a logical sequence of reasoning for the respondent to go through in determining a priority of "interest" in more education.

What Type of Training is Needed

Type of training refers to the content (e.g., for what occupation, for what hobby) of the education of interest. There are several means of approaching the task of identifying the type of program(s) of most interest to individuals. Here, interest is viewed as a proxy for "need" as judged from the individual's own perspective. Each procedure for identifying interest has advantages and disadvantages relative to ease of obtaining the information and its validity and reliability. In a review of research on vocational choice, Crites[8] summarizes that the means of measuring vocational choice which have been used are interview, open-ended questions, and questionnaire; the open-ended question was judged the best measure in terms of validity and reliability. Although vocational choice is not the same as interest in more education for a particular type of occupation, hobby or special interest, it seems reasonable that the concepts are similar in their measurement problems.

With this reasoning, the approach taken was to combine the advantage of a structured questionnaire designed to make the respondent aware of the alternatives available, with an open-ended question to obtain an indication of specific type of training desired. As shown in Exhibit 6 and 7, respondents

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[8]Crites, John O. Vocational Psychology. New York: McGraw-Hill Book Company, 1969, p. 570.

are first asked to choose among a comprehensive list of types of programs for hobbies and special interests, and for job training; then within each program purpose, they are asked to indicate their first, second, and third choices. The objective of this question is to obtain a decision on priorities relative to broad types of programs; in effect, the respondent is beginning to give an indication of program interest. However, the respondent can communicate that several program types may be of interest. Second, the respondent is asked in an open-ended format what specific kind of program is desired for the first choice of program type indicated in the previous question. Here the respondent can communicate specific and detailed interests in their own words. A combination of the first and second question is designed to maximize both validity and reliability of response, and enhance the ease with which this measure can be made.

The broad types of programs listed in the first question of the section on type of program of interest as shown in Exhibit 6 and 7 were developed by reviewing existing lists of educational programs and categories of program content (e.g., occupational categories). Resources which were reviewed included schools' educational program catalogs, U.S. Office of Education career education clusters, U.S. Office of Education taxonomy of vocational education programs, Minnesota Higher Education Coordinating Board program taxonomy, U.S. Census of Population list of

EXHIBIT 6

TYPE OF MORE EDUCATION OF INTEREST FOR HOBBIES OR SPECIAL INTERESTS

E. For the reason checked in Question D above, what type of programs would you like? Indicate your first choice with a "1," your second choice with a "2," and your third choice with a "3."

_____ 1. Basic skills (examples: refresher math, basic English) ☐ (23)

_____ 2. Arts and crafts (examples: oil painting, art, leather tooling)

_____ 3. Music (examples: guitar, banjo, piano)

_____ 4. Recreation (examples: camping, bridge, dancing) ☐ (24)

_____ 5. Home skills (examples: quilting, flower arrangement gourmet cooking)

_____ 6. Technical (examples: home remodeling, auto repair, plumbing, electrical wiring)

_____ 7. Liberal (examples: history, economics, foreign language) ☐ (25)

_____ 8. Other type, explain: _____

IMPORTANT

For the choice checked "1" in Question E above, describe in detail the actual topic you had in mind. Examples: refresher math, guitar, plumbing, history.

_____ ☐☐☐ (26-28)

EXHIBIT 7

TYPE OF MORE EDUCATION OF INTEREST FOR JOB OR EMPLOYMENT RELATED TRAINING

G. For the reason checked in Question F above, what are the job(s) for which you would like to better prepare? Indicate your first choice with a "1," your second choice with a "2," and your third choice with a "3."

_____ 1. Agriculture (examples: farmer, tractor mechanic, feed salesperson, florist)

_____ 2. Office and accounting (examples: secretary, cashier, bookkeeper, accountant, office manager)

_____ 3. Communications (examples: newspaper reporter, photographer, telephone operator, radio repairperson) ☐ (30)

_____ 4. Construction (examples: carpenter, electrician, painter, plumber) ☐ (31)

_____ 5. Consumer homemaking (examples: homemaker, parent)

_____ 6. Environment (examples: water quality technician, air pollution technician, sewage plant worker) ☐ (32)

_____ 7. Entertainment (examples: musician, sound and light technician, backstage hand, actor or actress)

_____ 8. Health (examples: nurse, surgical technician, nursing assistant, dental laboratory technician, doctor)

_____ 9. Hospitality and recreation (examples: maid or houseman, cook, waiter or waitress, dietitian, motel manager, guide, resort worker)

_____ 10. Manufacturing (examples: machinist, assembler, plant manager)

_____ 11. Personal service (examples: barber or cosmetologist, child care worker, tailor, seamstress)

_____ 12. Public service (examples: police staff, teacher, safety inspector, social service worker)

_____ 13. Transportation (examples: truck driver, auto mechanic, service station manager, stewardess, pilot)

_____ 14. Sales and marketing (examples: salesperson, advertising specialist, merchant, appraiser)

_____ 15. Other, explain: _____

IMPORTANT

For the group of jobs checked "1" in Question G, describe in detail the actual job you had in mind for which more training is desired. Examples: secretary, carpenter, farmer, registered nurse.

_____ ☐☐☐

_____ _____ (33-35)

occupations and industries, and the Dictionary of Occupational Titles. The broad educational program categories were then subject to review by educational and other staff personnel located in the selected project site area. In addition, for each set of program categories, an "other" is included to make sure that the respondent has some place to respond if the listed categories appear inappropriate. For each broad program

category, examples of types of specific programs are illustrated in order to clarify the broad program category labels.

How Many Want Training

The answer to the gross question of how many want training is designed to be obtained from responses to questions about the purpose of training as shown in Exhibit 4 and 5. All responses to the choices other than "do not want more education" are considered to be indications of an interest in more education. Indications of how many want more education for a particular purpose in a particular type of program can be obtained by observing the frequency of responses to other sections of the questionnaire (see Exhibits 6-9).

When Could Training Be Attended

The question designed to obtain an indication of "when" programs could be conveniently attended is shown in Exhibit 8. Respondents are asked to respond to all alternative times during which they could attend an educational program. The categories are designed to represent the broad alternatives which are possible for educational agencies and organizations.

EXHIBIT 8

WHEN COULD MORE EDUCATION BE ATTENDED

H. When could you attend an educational program? Check as many as you can.

_____	1. Day (Monday-Friday)	(36)
_____	2. Night (Monday-Friday)	(37)
_____	3. Weekends	(38)

What Are Special Barriers To Attending

In an effort to obtain information of particular use in the planning of "how" programs will be implemented, respond-

ents are asked to indicate serious problems or barriers they may have in attending programs (see Exhibit 9). The list of problems was developed by a review of other studies of this kind, discussions with groups of educational personnel, and responses to this question on previous assessment studies. Again, an "other" category is included for responses which do not appear to fit the listed categories.

EXHIBIT 9

PROBLEMS TO ATTENDING MORE EDUCATION

1. What are some of the most serious problems that may prevent you from attending an educational program? Check all that usually apply to you.

_____	1.	Program not available in local area. How far would you travel?_____miles	(39) (40-42)
_____	2.	Program not available at convenient time.	(43)
_____	3.	Could not meet admission requirements.	(44)
_____	4.	Costs of attending are too high.	(45)
_____	5.	Present job does not allow time.	(46)
_____	6.	Family obligations (e.g., child care) do not allow time.	(47)
_____	7.	More training would not raise my income.	(48)
_____	8.	Have no transportation.	(49)
_____	9.	I never hear about programs being offered and I don't know where to find out.	(50)
_____	10.	Other, explain: _____	(51)

_____

J. Would you like help in deciding what type of further education or job training you need? (52)

_____yes_____no

Another problem respondents may have is in trying to decide what type of further education they really need. For this purpose, an additional question is included as shown in Exhibit 9 to obtain an indication of how many want help in making their decisions about further education.

Where Could Training Be Attended

In order to obtain information on "where" training could be attended, two items of information are included on the

questionnaire. The first is a code for the specific geographic location of the respondent's household. The location is specific enough to identify which block within a city and township within a rural area. It can also be aggregated more broadly in terms of city and county. This code is contained in the boxes in the upper left hand corner of the questionnaire (see Appendix VII) and placed on the questionnaire at the time the sample of households is identified.

The second item of information on the questionnaire relating to "where" programs could be attended is shown in Exhibit 9 as a part of problem "1", in terms of "How far would you travel?" Combining these two items of information -- where the respondent lives and how far they are willing to travel -- provides an indication of where programs can conveniently be attended.

COLLECTING THE DATA

The needs assessment procedure was divided into nine stages. Each of these stages addressed an important group of activities which contributed to the completion of some facet of the study. A brief explanation of each of the nine stages is presented below.

Staff Preparation

Staff preparation involved the hiring of key staff, and the orientation of the hired staff and supporting personnel to the rationale and procedures for vocational needs assessment. The orientation was accomplished through a series of preliminary meetings. As a result of these meetings, contract commitments were agreed upon and the availability of necessary space and equipment was confirmed.

Population Definition

The purpose of this stage of the procedure was to identify the population of concern and record base data concerning pop-

ulation and household numbers so that the appropriate sample size could be determined. It was agreed upon that the population of Minnesota's Economic Development Region Four would comprise the population of concern. Specifically, the population sub-groups which were selected consisted of: (1) all persons out of high school (generally age 19 and over) and (2) all high school seniors (generally 18 years of age). These sub-groups were selected because they represent the major clients for education and job preparation beyond high school. Efforts were directed toward the recording of base data relating to the population and households in each of the nine counties in this region. The age and sex distribution of the population was also recorded to enable future comparison of the population and sample characteristics relating to these factors.

Public Relations

This stage of the procedure had a dual purpose. The first was to make the population aware of the purpose of the study thereby enhancing their cooperation. The second purpose was to enable potential users of the study results to be made aware of the study so that they might give support to the assessment efforts and begin to plan how they could use the data.

The public relations activities involved contacting key persons and agencies, and using radio and newspaper communications releases. Administrators of secondary and post secondary schools were contacted, and the West Minnesota Consortium -- an educational advisory committee for Rural Minnesota -- contributed their reactions in the development of the needs assessment questionnaire.

Sample Selection

At this stage of the procedure, the sample size was determined and the sample population was identified. For the subgroup of the population out of high school, it was decided that a 5% sample would be sufficient given the resources available and the desired level of accuracy. As a result, a sample of 3,606 households was randomly selected using a modification of the sampling method used by the United States Bureau of Census

in its Current Population Survey.[9]

The sample selection procedure for the population subgroup out of high school entailed the following nine steps:

1. Listing all the Enumeration Districts in each county in descending order by population size according to the 1970 Census data. An Enumeration District or Census Tract is a distinct geographic area containing a given number of people.

2. Listing the number of dwellings or households in each Enumeration District alongside the population count.

3. Estimating the number of sampling segments in each Enumeration District. A sampling segment is a group of approximately 6 households.

4. Determination of the cummulative number of sampling segments in the area to be sampled.

5. Determination of the number of sampling segments to be selected from each Enumeration District or Census Tract.

6. Locating households within each Enumeration District.

7. Grouping households into sampling segments and assigning a number to each segment.

8. Randomly selecting sampling segments to be included in the survey.

9. Identifying names and addresses of households in selected sample segments.

The end result of this procedure was a list of the names and addresses of the residents for the randomly selected sample of households in Minnesota's Economic Development Region Four.

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[9]U.S. Bureau of Census, The Current Population Survey - A Report On Methodology, Technical Paper No. 7, U.S. Government Printing Office, Washington, D.C., 1963.

In addition to the household sample, a sample of high school seniors from the Region was selected for the population sub-group for high school seniors. The sample included students from one high school in each of the nine counties of the Region. Only the largest high school in each county was selected to be included in the sample due to the limitation of time. A procedure was developed to select a representative sample of high school seniors within the selected high schools. A 20% sample was taken from high schools with 200 or more students in the senior class; and in high schools with less than 40 students, all students completed the questionnaire. Appendix VI describes the county distribution of the sample for high school seniors and households.

Preparation For Mailing

The method of data collection decided upon was the mailed questionnaire. A procedures manual which provided directions for the preparation and mailing of questionnaires was prepared. The manual identified materials required, suggested a format for the cover letter, and provided guidelines for efficient preparation and handling of materials for mailing.

Questionnaire Return

At this stage of the procedure, an effective method was needed for dealing with questionnaires returned by respondents. As a result, an information sheet presenting directions for returned questionnaires was prepared. A "filing system" was described which allowed for accurate and efficient handling of the returned questionnaires to prevent loss or damage.

Non-Respondents

At this stage of the procedure, directions were provided for obtaining data from those individuals who did not respond

to the first questionnaire. The process involved two different activities. First, directions were given for the preparation and mailing of a second questionnaire to all households not responding to the first questionnaire; this was followed by a third reminder letter to those not responding to the second mailed questionnaire. The second activity involved contacting all remaining non-respondents by telephone; a script was provided for this purpose.

Coding

An information sheet was prepared presenting guidelines and directions for coding the responses on the questionnaire. The numerically coded responses were entered on the questionnaire to be key punched on computer cards which enabled computer data analysis. The following items were coded:

1. Age
2. Sex
3. Present occupation
4. Reason for not working or working less time than desired
5. Need for education in hobbies and special interest (reasons)
6. Program categories of interest (first, second, and third choices)
7. Specific area of interest (hobbies and special interests)
8. Need for job training (reasons)
9. Job categories of interest (first, second, and third choices)
10. Specific jobs of interest
11. Convenient attendance time
12. Hindrances to attending an educational program

13. Need for help to determine what type of further education or job training is needed.

A code listing was developed to provide code numbers in the area of hobbies and special interest. The Alphabetical Index of Industries and Occupations,[10] a publication of the U.S. Department of Commerce, was the source of code numbers for coding specific occupations and occupational categories.

Preparation for Data Analysis

Before submitting the returned questionnaires for data analysis, the local project director ensured that the questionnaires and related materials were acceptably prepared. Questionnaires were double checked for complete coding, put into proper sequence, and packaged according to the county from which the questionnaire was returned. The household identification form and other process evaluation forms were completed and submitted with the questionnaires to the Minnesota Research Coordinating Unit for Vocational Education for further editing and analysis. Keypunching and computer analysis of the questionnaire data were done at the St. Paul Campus Computing Center, University of Minnesota.

TRAINING AND MONITORING

At each stage of the project, information sheets were prepared providing directions for the procedure to be used at that stage. In addition, a representative of the Minnesota Research Coordinating Unit (RCU) visited the project site to explain and illustrate the procedures and provide additional assistance when it was needed. See Appendix I for a schedule of visits and their purpose. In addition to the visits, telephone communication facilitated the solution of minor problems, and enabled the RCU staff to monitor the project's progress along pre-specified timelines.

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[10] U.S. Bureau of Census, 1970 Census of Population Alphabetical Index of Industries and Occupations, U.S. Government Printing Office: Washington, D.C., 1971.

EVALUATING ASSESSMENT PROCEDURE

The Minnesota Research Coordinating Unit developed evaluation forms to record the project's costs, time requirements, and the rate of questionnaire return. The local project director was also requested to submit a summary of problems incurred, suggestions for improvements, and a list of sources from which helpful materials were obtained. Sub-studies were conducted to assess the validity of questionnaire responses and the stability of responses over time.

CHAPTER III

RESULTS OF ASSESSMENT

Results of the assessment study of people's need for additional job training are presented in two sections. The first is a description of the summary tables of data collected from the two sub-groups of the population in Economic Development Region 4: (1) those over high school age and (2) high school seniors. The second is an examination of the assessment process in terms of time required, costs, problems, suggestions for improvement, and validity and stability of responses.

SUMMARY TABLE FOR RESIDENTS OVER HIGH SCHOOL AGE IN REGION 4

The assessment results for residents of Economic Development Region 4 who are over high school age (i.e., 19+) are based on returned responses from 63 percent of the 3,606 households sampled. As shown in Table 3, about 50 percent of the responses resulted from the mailed questionnaires and 50 percent from telephone follow-up interviews.

TABLE 3

QUESTIONNAIRE RESPONSE IN HOUSEHOLD SURVEY
FOR EACH METHOD OF CONTACT

METHOD OF CONTACT	NUMBER OF HOUSEHOLDS RESPONDING	PERCENT OF TOTAL RETURNED	PERCENT OF TOTAL IN SAMPLE
1st Mailing	281	13	8
2nd Mailing	567	25	16
3rd Mailing	188	8	5
Telephone Follow-Up	1,217	54	34
TOTAL	2,253	100	63

To check the degree to which the sample responses were representative of the population of Region 4 for residents 19 years old and older, Table 4, 5, 6, and 7 are presented to describe the age, sex, employment status, and occupation of the respondents as compared to the population. Population data was taken from the 1970 Census of Population for Region 4.

From a comparison of the sample and the population, cautions which may bias the data are as follows: (1) there were proportionately less responses from the age group 20-29 and more from the age group 60-69 than would be anticipated by comparison to population data (Table 4), (2) there were proportionately more farmers and farm laborers and service workers and less non-farm laborers than would be anticipated by comparison to population data (Table 7), and (3) there were proportionately more working and less not working than would be anticipated by comparison to population data (Table 6).

TABLE 4

AGE OF RESPONDENTS
(households)

AGE GROUP	NO. OF RESPONSES	PERCENT OF REPORTED	NO. IN POPULATION[a]	PERCENT OF TOTAL
Less than 20	103	2.8	3,773	3.3
20 - 29	441	11.8	20,930	18.4
30 - 39	535	14.3	17,079	14.7
40 - 49	586	15.7	19,072	16.5
50 - 59	761	20.4	20,285	17.7
60 - 69	895	24.0	17,326	15.0
70 or more	412	11.0	17,044	14.7
Not Reported	1	----	---	----
TOTAL REPORTED	3,733	100.0	115,509	100.0

[a]Age 19 and over, from 1970 Census of Population

TABLE 5

SEX OF RESPONDENTS
(households)

SEX	NO. OF RESPONSES	PERCENT OF REPORTED	NO. IN POPULATION[a]	PERCENT OF TOTAL
Male	1,735	46.8	56,619	49.0
Female	1,972	53.2	58,890	51.0
Not Reported	27	----	---	----
TOTAL REPORTED	3,707	100.0	115,509	100.0

[a]Age 19 and over, from 1970 Census of Population

TABLE 6

EMPLOYMENT STATUS OF RESPONDENTS
(households)

EMPLOYMENT STATUS	NO. OF RESPONSES	PERCENT OF REPORTED	NO. IN POPULATION[a]	PERCENT OF TOTAL
Working	1,476	67.9	65,298	56.5
As Much As Desired	965	44.4		
Less Than Desired (underemployed)	511	23.5		
Not Working	697	23.1	50,211	43.5
Cannot Find Work	29	1.0	5,313[b]	4.6
TOTAL REPORTED	2,173	100.0	115,509	100.0

[a]Age 19 and over, from 1970 Census of Population

[b]Based on an average 4.6 percent unemployment estimate for the months of April-June, 1976, West Central Regional Development Commission staff

TABLE 7

PRESENT OCCUPATION OF RESPONDENTS
(households)

OCCUPATIONAL GROUP	NO. OF RESPONSES	PERCENT OF REPORTED	NO. IN POPULATION[a]	PERCENT OF TOTAL
Professional, Technical and Related Workers	195	13.2	8,136	12.5
Managers and Administrators, except Farm	106	7.2	5,797	8.9
Sales Workers	45	3.0	4,708	7.2
Clerical and Related Workers	124	8.4	8,320	12.7
Craftsmen and Related Workers	86	5.8	6,921	10.6
Operatives	61	4.1	6,781	10.4
Laborers, except Farm	47	3.2	12,373	19.0
Farmers and Farm Laborers	249	16.9	2,503	3.8
Service Workers	563	38.1	9,759	14.9
Not Reported	2,258	----	---	----
TOTAL REPORTED	1,476	100.0	65,298	100.0

[a]Age 16 and over was used because information was not available for age 19 and over, from 1970 Census of Population

With these limitations in mind, results are presented in a series of summary tables each relating to a question on the questionnaire. The tables are titled as follows:

Table 8. Need for Education for Hobbies and Special Interests

Table 9. Reasons for Wanting More Education for Hobbies and Special Interests

Table 10. Programs of Interest for Hobbies and Special Interest (Sample)

Table 11. Programs of Interest for Hobbies and Special Interest (Population Estimate)

Table 12. Detailed Programs of Interest for Hobbies and Special Interests (Sample)

Table 13. Need for Job Training

Table 14. Reason for Wanting Job Training

Table 15. Job Group for Which Training is Wanted (Sample)

Table 16. Job Groups for Which Training is Wanted (Population Estimate)

Table 17. Detailed Job for Which Training is Wanted

Table 18. Need for More Education

Table 19. Time When More Education Could be Attended

Table 20. Hindrances to Attending Educational Programs

Table 21. Distance Willing to Travel if Transportation is a Hindrance

Table 22. Help Needed to Determine Educational Needs

A general explanation of each table is provided in Appendix VIII. Reference should also be made to the questionnaire shown in Appendix VII for assistance in interpreting the tables. For most questions, the responses of those responding to the questionnaire are summarized, and, using sample information, estimates are made of population values. When making the population estimate, the most conservative estimate

TABLE 8

SUMMARY TABLE ON NEED FOR MORE EDUCATION
FOR HOBBIES AND SPECIAL INTERESTS
(households)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	947	16.11	18,608
No	4,931	83.89	96,901
TOTAL	5,878	100.00	115,509

[a]This is an estimate based on the assumption that all persons in the sample who did not respond to the assessment questionnaire did not want more education for hobbies and special interest, and an assumption that there was an average of 1.6 persons per household over 18 years of age in West Central Region.

TABLE 9

SUMMARY TABLE ON REASON FOR WANTING MORE EDUCATION
FOR HOBBIES AND SPECIAL INTERESTS
(households)

REASON	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Better use of leisure	204	21.54	4,008
Save money	241	25.45	4,735
Self-improvement	502	53.01	9,865
TOTAL	947	100.00	18,608

TABLE 10

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR HOBBIES AND SPECIAL INTERESTS FOR SAMPLE
(households)

PROGRAM AREA	FIRST CHOICE NO. IN SAMPLE	FIRST CHOICE PCT	SECOND CHOICE NO. IN SAMPLE	SECOND CHOICE PCT	THIRD CHOICE NO. IN SAMPLE	THIRD CHOICE PCT	WEIGHT PCT
Basic Skills	54	5.88	40	6.41	36	8.37	6.27
Arts and Crafts	199	21.65	131	20.99	59	13.72	20.70
Music	52	5.66	66	10.58	55	12.79	7.73
Recreation	90	9.79	106	16.99	90	20.93	12.90
Home Skills	157	17.08	123	19.71	73	16.98	17.81
Technical	294	31.99	96	15.38	62	14.42	25.61
Liberal	71	7.73	61	9.78	55	12.79	8.79
Other	2	.22	1	.16	0	.00	.19
TOTAL	919	100.00	624	100.00	430	100.00	100.00

TABLE 11

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR HOBBIES AND SPECIAL INTERESTS FOR POPULATION
(households)

PROGRAM AREA	POPULATION ESTIMATE FIRST CHOICE	POPULATION ESTIMATE SECOND CHOICE	POPULATION ESTIMATE THIRD CHOICE
Basic Skills	1,060	785	707
Arts and Crafts	3,909	2,573	1,159
Music	1,021	1,296	1,081
Recreation	1,767	2,082	1,767
Home Skills	3,085	2,417	1,434
Technical	5,777	1,886	1,218
Liberal	1,395	1,198	1,081
Other	39	20	0
TOTAL	18,053	12,257	8,447

TABLE 12

SUMMARY TABLE OF SPECIFIC COURSES OF INTEREST
FOR HOBBIES AND SPECIAL INTERESTS
(households)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Basic Skills	13	2.30
Adult Basic Education	6	
Basic Math	7	
Arts and Crafts	99	17.52
Crocheting	6	
Decoupage	2	
Jewelry Making	1	
Knitting	2	
Macrame	5	
Needlepoint	9	
Norweigian Harbinger Embroidery	1	
Oil and Acrylic Painting	23	
Pottery	2	
Quilting	2	
Rug Hooking	2	
Rya Technique	2	
Sculptures with Salt Dough	1	
Wood Carving	7	
Ceramics	10	
Theatre	1	
Arts & Crafts for Profit	11	
Leather Tooling	6	
Water Color Painting	3	
Rosemaling	3	
Music	46	8.14
Banjo	2	
Ear Training	2	
Fundamentals of Music	1	
Guitar	22	
Piano	15	
Voice Training	2	
Dance, Ballet, Other than Ballroom	1	
Organ	1	
Recreation	63	11.15
Ballroom Dance	4	
Basketball	1	
Bowling	1	
Camping	15	

TABLE 12 (continued)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Recreation (continued)		
Canoeing	3	
Curling	1	
Figure Skating	11	
Fishing	1	
Golf	4	
Gymnastics	1	
Hiking	1	
Hunting	2	
Judo	1	
Karate	1	
Sailing	1	
Scuba and Skin Diving	1	
Skiing	3	
Slimnastics	1	
Swimming	2	
Tennis	2	
Track and Field	1	
Volleyball	1	
Yoga	1	
Sports, Outdoor	3	
Home Skills	54	9.56
Cake Decorating	5	
French Cuisine	1	
Main Dish Cookery	2	
Sewing	18	
Any Home Skills	10	
Quilting	7	
Flower Arrangement	9	
Cooking	1	
Patchwork	1	
Technical	216	38.23
Adult Driver Education	1	
Auto Mechanics	31	
Basic Pattern Design	1	
Bookkeeping	4	
Clothing Construction	1	
First Aid and Pre-Med Safety	2	
Gourmet Cookery	6	
Income Tax Preparation	5	
Interior Decorating	6	
Photography	1	

TABLE 12 (continued)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Technical (continued)		
Refinishing Furniture	4	
Sewing Lingere, Knit Fabrics	1	
Shorthand	7	
Upholstery	1	
Woodworking	15	
Welding	4	
Wiring, Electrical	14	
Carpentry	9	
Home Remodeling & Repair	56	
Communication	1	
Business Administration	2	
Electronics	3	
Small Engine Repair	9	
Plumbing	10	
Fire Science	1	
Typing	4	
Graphic Arts	2	
Transcendential Meditation	1	
Masonry	3	
Grain Inspector	3	
Tractor Mechanic	5	
Business Skills (refresher)	1	
Caring for Animals	1	
Nursing	1	
Liberal	74	13.10
Accounting	2	
American Indian Studies	1	
American Studies	1	
Anatomy	1	
Arts, Studio	13	
Business Administration	3	
Chicano Studies	1	
Child Psychology	3	
Economics	1	
English	6	
Family Social Science	2	
German	1	
History	5	
International Relations	2	
Mathematics	8	
Norwegian	2	
Philosophy	1	

TABLE 12 (continued)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Liberal (continued)		
Swedish	1	
Spanish	5	
Speech Communications	1	
Speed Reading	2	
Electronics	2	
Vocational Certified	1	
Remedial Reading	1	
Estate and Financial Planning	1	
World History	1	
Education	2	
Photography	2	
Writing	2	
TOTAL	565	100.00

TABLE 13

SUMMARY TABLE ON NEED FOR MORE JOB TRAINING
(households)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	639	10.87	12,555
No	5,239[a]	89.13	102,954
TOTAL	5,878	100.00	115,509

[a]This is an estimate based on the assumption that all persons in the sample who did not respond to the assessment questionnaire did not want more education for job training, and an assumption that there was an average of 1.6 persons per household over 18 years of age in the West Central Region.

TABLE 14

SUMMARY TABLE ON REASON FOR WANTING
MORE EDUCATION FOR JOB TRAINING
(households)

REASON	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
First Job	72	11.27	1,415
Retrain	134	20.97	2,633
Re-enter	66	10.33	1,297
Promotion	112	17.53	2,200
Update	162	25.35	3,183
Certification	93	14.55	1,827
TOTAL	639	100.00	12,555

TABLE 15

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR JOB TRAINING FOR SAMPLE
(households)

JOB GROUP	FIRST CHOICE NO. IN SAMPLE	FIRST CHOICE PCT	SECOND CHOICE NO. IN SAMPLE	SECOND CHOICE PCT	THIRD CHOICE NO. IN SAMPLE	THIRD CHOICE PCT	WEIGHT PCT
Agriculture	89	15.32	19	5.64	13	5.49	11.98
Office and Accounting	108	18.59	54	16.02	22	9.28	17.11
Communications	24	4.13	16	4.75	22	9.28	4.75
Construction	48	8.26	45	13.35	18	7.59	9.50
Consumer	22	3.79	38	11.28	16	6.75	5.95
Environment	5	.86	9	2.67	11	4.64	1.66
Entertainment	7	1.20	14	4.15	11	4.64	2.26
Health	89	15.32	21	6.23	10	4.22	12.02
Hospitality	9	1.55	10	2.97	9	3.80	2.11
Manufacturing	13	2.24	9	2.67	13	5.49	2.64
Personal Service	15	2.58	17	5.04	14	5.91	3.50
Public Service	91	15.66	36	10.68	29	12.24	14.09
Transportation	23	3.96	18	5.34	24	10.13	4.86
Sales and Marketing	37	6.37	31	9.20	25	10.55	7.46
Other	1	.17	0	.00	0	.00	.11
TOTAL	581	100.00	337	100.00	237	100.00	100.00

TABLE 16

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR JOB TRAINING FOR POPULATION
(households)

JOB GROUP	POPULATION ESTIMATE FIRST CHOICE	POPULATION ESTIMATE SECOND CHOICE	POPULATION ESTIMATE THIRD CHOICE
Agriculture	1,748	372	254
Office and Accounting	2,121	1,060	431
Communications	472	313	431
Construction	942	883	354
Consumer Homemaking	431	747	313
Environment	97	177	215
Entertainment	138	274	215
Health	1,748	413	195
Hospitality	177	195	177
Manufacturing	254	177	254
Personal Service	295	333	274
Public Service	1,787	706	569
Transportation	451	354	472
Sales and Marketing	726	608	490
Other	20	0	0
TOTAL	11,407	6,612	4,644

TABLE 17

SUMMARY TABLE OF SPECIFIC JOBS OF INTEREST
FOR MORE JOB TRAINING
(households)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Professional, Technical, and Kindred Workers	188	44.34
Accountants	22	
Computer Programmers	2	
Computer Systems Analysts	1	
Electrical and Electronic Engineers	2	
Industrial Engineers	2	
Engineers, N.E.C.	1	
Foresters and Conservationists	1	
Lawyers	4	
Librarians	1	
Biolograical Scientists	1	
Chemists	1	
Personnel and Labor Relations Workers	2	
Pharmacists	1	
Physicians, Medical and Osteopathic	17	
Veterinarians	1	
Dietitians	2	
Registered Nurses	16	
Therapists	4	
Clinical Laboratory Technologists & Technicians	3	
Dental Hygienists	2	
Radiologic Technologists and Technicians	1	
Health Technologists and Technicians, N.E.C.	1	
Clergymen	1	
Economists	1	
Sociologists	1	
Social Workers	13	
Recreation Workers	2	
Mathematics Teachers	2	
Psychology Teachers	1	
Art, Drama, and Music Teachers	1	
Education Teachers	1	
Trade, Industrial, and Technical Teachers	2	
Teachers, College & University Subject Not Spec.	7	
Adult Education Teachers	5	
Elementary School Teachers	7	
Prekindergarten & Kindergarten Teachers	3	
Secondary School Teachers	2	
Teachers, except College & University, N.E.C.	17	
Draftsmen	3	

TABLE 17 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Professional, Technical, and Kindred Workers (continued)		
Electrical & Electronic Engineering Technicians. .	1	
Mechanical Engineering Technicians	1	
Engineering & Science Technicians, N.E.C..	2	
Vocational & Educational Counselors.	2	
Actors	2	
Authors.	1	
Designers.	4	
Editors & Reporters.	4	
Musicians & Composers.	1	
Painters and Sculptors	4	
Photographers.	3	
Public Relations Men & Publicity Writers	2	
Writers, Artists, & Entertainers, N.E.C.	1	
Research Workers, Not Specified.	3	
Managers and Administrators, except Farm	38	8.96
Bank Officers & Financial Managers	5	
Buyers & Shippers, Farm Products	2	
Health administrators.	4	
Office Managers, N.E.C..	2	
Postmasters & Mail Superintendents	1	
Pruchasing Agents & Buyers, N.E.C.	1	
Restaurants, Cafeteria, & Bar Managers	1	
Sales Managers & Department Heads, Retail Trade. .	1	
Managers & Administrators, N.E.C..	21	
Sales Workers	13	3.07
Advertising Agents & Salesmen.	1	
Insurance Agents, Brokers, & Underwriters.	2	
Real Estate Agents & Brokers	2	
Stock & Bond Salesmen.	1	
Salesmen & Sales Clerks, N.E.C..	7	
Clerical and Kindred Workers	46	10.85
Bookkeepers.	11	
Counter Clerks, except Food.	1	
Key Punch Operators.	1	
Receptionists.	1	
Secretaries, Legal	1	
Secretaries, Medical	1	
Secretaries, N.E.C..	18	
Shipping & Receiving Clerks.	4	
Teacher Aides, except School Monitors.	1	

TABLE 17 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Clerical and Kindred Workers (continued)		
Telephone Operators	5	
Typists	1	
Not Specified Clerical Workers	1	
Craftsmen and Kindred Workers	55	12.97
Carpenters	15	
Decorators & Window Dressers	2	
Electricians	7	
Locomotive Engineers	1	
Air Conditioning, Heating, & Refrigeration Mech	1	
Automobile Body Repairmen	4	
Automobile Mechanics	8	
Farm Implement Mechanics	1	
Heavy Equipment Mechanics, includes Diesel	8	
Household Appliance-Accessory Installers, Mech.	2	
Radio & Television Repairmen	1	
Not Specified Mechanics & Repairmen	1	
Plumbers & Pipe Fitters	2	
Sign Painters & Letters	1	
Telephone Installers & Repairmen	1	
Operatives, except Transportation	8	1.89
Assemblers	1	
Dressmakers & Seamstresses, except Factory	3	
Photographic Process Workers	2	
Stationary Firemen	2	
Transportation Equipment Operatives	2	.47
Motormen; Mine, Factory, Logging Camp, etc.	1	
Truck Drivers	1	
Laborers, except Farm	2	.47
Construction Laborers, except Carpenters' Helpers	1	
Longshoremen & Stevedores	1	
Farmers and Farm Managers	29	6.84
Farmers (owners & tenants)	27	
Farm Managers	2	
Farm Laborers and Farm Foremen	2	.47
Farm Laborers, Upaid Family Workers	2	
Service Workers, except Private Household	39	9.20
Cooks, except Private Household	1	

TABLE 17 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Service Workers, except Private Household (continued)		
Waiters	1	
Food Service Worker, N.E.C., exc Private Household.	1	
Dental Assistants	4	
Nursing Aides, Orderlies, & Attendants.	2	
Practical Nurses.	15	
Child Care Workers, except Private Household.	1	
Hairdressers & Cosmetologists	3	
Housekeepers, except Private Household.	2	
Welfare Service Aids.	7	
Policemen & Detectives.	2	
Private Household Workers	2	.47
Child Care Workers, Private Household	1	
Cooks, Private Household.	1	
TOTAL	424	100.00

TABLE 18

SUMMARY TABLE ON INTEREST IN MORE EDUCATION
(households)

NEED FOR MORE EDUCATION	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	1,085	18.46	21,323
No	4,793[a]	81.54	94,186
TOTAL	5,878	100.00	115,509

[a]This is an estimate based on the assumption that all persons in the sample who did not respond to the assessment questionnaire did not want more education for hobbies and special interests or job training, and an assumption that there was an average of 1.6 persons per household over 18 years of age in the West Central Region.

TABLE 19

SUMMARY TABLE ON WHEN MORE EDUCATION COULD BE ATTENDED
(households)

TIME	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Weekend	39	4.79	766
Night	395	48.47	7,762
Night or Weekend	118	14.48	2,320
Day	132	16.20	2,594
Day or Weekend	5	.61	99
Day or Night	94	11.53	1,847
Day or Night or Weekend	32	3.93	629
TOTAL	815	100.00	16,017

TABLE 20

SUMMARY TABLE ON HINDRANCES TO ATTENDING MORE EDUCATION
(households)

HINDRANCES	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Distance (too far)	346	32.67	1,256
Inconvenient Time	284	26.82	1,032
Requirements Too High	39	3.68	143
Cost Too High	192	18.13	697
Requirements of Job	386	36.45	1,400
Family Obligations	307	28.99	1,115
Stable Income	129	12.19	469
Lack of Transportation	44	4.16	160
Not Informed	155	14.04	563
Other	138	13.04	501
TOTAL	1,059[a]		

[a]This sum represents the number of respondents. It is not the sum of the column since multiple responses were accepted.

TABLE 21

SUMMARY TABLE ON DISTANCE WILLING TO TRAVEL FOR THOSE WITH A TRANSPORTATION HINDRANCE (households)

DISTANCE	NUMBER IN SAMPLE	PERCENT
1 - 10 miles	45	18.75
11 - 20 miles	82	34.17
21 - 30 miles	56	23.33
31 - 40 miles	20	8.33
Over 40 miles	37	15.42
TOTAL	240	100.00

TABLE 22

SUMMARY TABLE ON NEED FOR HELP TO DETERMINE EDUCATIONAL NEED (households)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	235	4.00	4,620
No	5,643[a]	96.00	110,889
TOTAL	5,878	100.00	115,509

[a]This is an estimate based on the assumption that all persons in the sample who did not respond to the assessment questionnaire did not want help to determine their educational need, and an assumption that there was an average of 1.6 persons per household over 18 years of age in the West Central Region.

was made of interest in additional education by assuming that all those in the sample who did not respond to the questionnaire were not interested in more education for either hobbies and special interests or job training. The population of persons age 19 or over in Region 4, as shown in the 1970 Census of Population (i.e., 115,509 persons), was used as the base from which population estimates were made.

SUMMARY TABLES FOR HIGH SCHOOL SENIORS IN REGION 4

As with residents over high school age, a set of summary tables is shown for high school seniors in Economic Development Region 4. The information is based on responses from a sample of high school seniors in the largest high school in each of the nine counties in Region 4. The same questionnaire as that mailed to households was administered to a sample of seniors in their respective high schools. The schools involved and the numbers of seniors completing the questionnaires in each school are shown in Table 23. The age, sex, employment status and occupation held by responding high school seniors is shown in Table 24, 25, 26, and 27, respectively.

The summary tables on need for additional education are shown as Tables 24-43 with titles which are the same as those shown in the previous section for residents over high school age. An explanation of the table format and interpretation is presented in Appendix VIII. The base population on which population estimates are made was an estimate of the total number of high school seniors in Region 4(i.e., 3,943 students) as provided by the Statistics Section in the Minnesota State Department of Education. In making the population estimates, it was assumed that the sample was representative of the population of high school seniors in the Region.

RESULTS OF PROCEDURAL EVALUATION

The major purpose of the project described in this report was to develop and evaluate a procedure for assessing people's need for additional job training. In order to accomplish the evaluation aspect of this purpose, detailed records were kept of the time required and costs incurred in the project. During

TABLE 23

SCHOOLS FROM WHICH THE SAMPLE OF HIGH SCHOOL SENIORS WERE SELECTED

COUNTY	SCHOOLS	NUMBER OF RESPONDING SENIORS
Becker	Community Senior High	40
Clay	Moorhead Senior High	161
Douglas	Jefferson Senior High	57
Grant	Elbow Lake High School	34
Otter Tail	Fergus Falls High School	69
Pope	Glenwood High School	60
Stevens	Morris High School	85
Traverse	Wheaton High School	40
Wilkin	Breckenridge High School	28

TABLE 24

AGE OF RESPONDENTS
(high school seniors)

AGE	NUMBER OF RESPONSES	PERCENT OF REPORTED
15	0	.0
16	4	.7
17	167	29.0
18	391	68.0
19	11	2.0
20	1	.3
Not Reported	---	----
TOTAL REPORTED	574	100.0

TABLE 25

SEX OF RESPONDENTS
(high school seniors)

SEX	NUMBER OF RESPONSES	PERCENT OF REPORTED
Male	258	44.9
Female	316	55.1
Not Reported	---	----
TOTAL REPORTED	574	100.0

TABLE 26

EMPLOYMENT STATUS OF RESPONDENTS
(high school seniors)

EMPLOYMENT STATUS	NUMBER OF RESPONSES	PERCENT OF REPORTED
Working As Much As Desired	117	20.93
Working Less Than Desired	213	38.10
Not Working	229	40.97
TOTAL	559	100.00

TABLE 27

PRESENT OCCUPATION OF RESPONDENTS
(high school seniors)

OCCUPATIONAL GROUP	NUMBER OF RESPONSES	PERCENT OF REPORTED
Professional, Technical and Related Workers	9	2.7
Managers and Administrators, except Farm	16	4.9
Sales Workers	10	3.0
Clerical and Related Workers	74	22.4
Craftsmen and Related Workers	28	8.5
Operatives	24	7.3
Laborers, except Farm	27	8.2
Farmers and Farm Laborers	37	11.2
Service Workers	105	31.8
Not Reported	244	----
TOTAL REPORTED	330	100.0

TABLE 28

SUMMARY TABLE ON REASON FOR NOT WORKING
OR WORKING LESS THAN DESIRED
(high school seniors)

REASON	NUMBER IN SAMPLE	PERCENT
In School	374	84.80
Retired	1	.22
Cannot Find Work	65	14.74
Do Not Want Work	35	7.94
Other Reason	38	8.62
TOTAL	441[a]	

[a]This sum represents the number of respondents. It is not the sum of the column since multiple responses were accepted.

TABLE 29

SUMMARY TABLE ON NEED FOR MORE EDUCATION
FOR HOBBIES AND SPECIAL INTERESTS
(high school seniors)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	478	83.27	3,283
No	96	16.73	660
TOTAL	574	100.00	3,943

TABLE 30

SUMMARY TABLE ON REASON FOR WANTING MORE EDUCATION
FOR HOBBIES AND SPECIAL INTERESTS
(high school seniors)

REASON	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Better Use of Leisure	119	24.90	817
Save Money	111	23.22	763
Self-Improvement	248	51.88	1,703
TOTAL	478	100.00	3,283

TABLE 31

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR HOBBIES AND SPECIAL INTERESTS FOR SAMPLE
(high school seniors)

PROGRAM AREA	FIRST CHOICE NO. IN SAMPLE	FIRST CHOICE PCT	SECOND CHOICE NO. IN SAMPLE	SECOND CHOICE PCT	THIRD CHOICE NO. IN SAMPLE	THIRD CHOICE PCT	WEIGHT PCT
Basic Skills	28	5.89	23	5.50	28	7.47	5.99
Arts and Crafts	56	11.79	52	12.44	64	17.07	12.75
Music	61	12.84	61	14.59	57	15.20	13.74
Recreation	130	27.37	138	33.01	64	17.07	27.70
Home Skills	46	9.68	65	15.55	75	20.00	13.01
Technical	131	27.58	51	12.20	55	14.67	20.86
Liberal	22	4.63	28	6.70	31	8.27	5.80
Other	1	.21	0	.00	1	.27	.15
TOTAL	475	100.00	418	100.00	375	100.00	100.00

TABLE 32

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR HOBBIES AND SPECIAL INTERESTS FOR POPULATION
(high school seniors)

PROGRAM AREA	POPULATION ESTIMATE FIRST CHOICE	POPULATION ESTIMATE SECOND CHOICE	POPULATION ESTIMATE THIRD CHOICE
Basic Skills	192	158	192
Arts and Crafts	384	357	439
Music	419	419	341
Recreation	893	947	439
Home Skills	316	446	515
Technical	900	350	378
Liberal	151	192	213
Other	7	0	7
TOTAL	3,262	2,869	2,574

TABLE 33

SUMMARY TABLE ON SPECIFIC COURSES OF INTEREST
FOR HOBBIES AND SPECIAL INTERESTS
(high school seniors)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Basic Skills	13	4.11
Adult Basic Education	4	
Basic Math	9	
Arts and Crafts	35	11.08
Needlepoint	1	
Oil and Acrylic Painting	14	
Pottery	5	
Quilting	2	
Rug Hooking	1	
Wood Carving	1	
Ceramics	3	
Arts & Crafts for Profit	2	
Leather Tooling	5	
Water Color Painting	1	
Music	59	18.67
Banjo	2	
Ear Training	1	
Fundamentals of Music	1	
Guitar	24	
Musical Arrangement	1	
Musical Instruments - Introduction	1	
Piano	15	
Saxaphone	1	
Violin	2	
Voice Training	6	
Dance, Ballet, other than Ballroom	4	
Organ	1	
Recreation	90	28.48
Archery	1	
Ballroom Dance	6	
Basketball	1	
Camping	49	
Canoeing	1	
Figure Skating	5	
Fishing	2	
Football	1	
Hiking	2	

TABLE 33 (continued)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Recreation (continued)		
Karate	1	
Paddleball	1	
Skiing	2	
Softball	1	
Swimming	2	
Tennis	2	
Horseback Riding	5	
Sports, Outdoor	8	
Home Skills	21	6.65
Main Dish Cookery	2	
Sewing	5	
Any Home Skills	4	
Quilting	7	
Flower Arrangement	1	
Cooking	2	
Technical	72	22.78
Auto Mechanics	25	
Gourmet Cookery	7	
Photography	3	
Woodworking	2	
Wiring, Electrical	3	
Carpentry	1	
Home Remodeling & Repair	21	
Electronics	2	
Small Engine Repair	1	
Plumbing	5	
Graphic Arts	1	
Transcendental Meditation	1	
Liberal	26	8.23
American Studies	1	
Art History	1	
Arts, Studio	5	
Business Administration	1	
English	3	
History	4	
Mathematics	2	
Norwegian	1	
Religious Studies	1	
Sociology	2	

TABLE 33 (continued)

PROGRAM AREA	NUMBER IN SAMPLE	PERCENT OF REPORTED
Liberal (continued)		
Spanish	2	
Engineering	2	
Photography	1	
TOTAL	316	100.00

TABLE 34

SUMMARY TABLE ON NEED FOR MORE JOB TRAINING
(high school seniors)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	488	85.02	3,352
No	86	14.98	591
TOTAL	574	100.00	3,943

TABLE 35

SUMMARY TABLE ON REASON FOR WANTING
MORE EDUCATION FOR JOB TRAINING
(high school seniors)

REASON	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
First Job	150	30.74	1,030
Retrain	136	27.87	934
Re-Enter	32	6.56	220
Promotion	56	11.48	385
Update	55	11.27	378
Certification	59	12.08	405
TOTAL	488	100.00	3,352

TABLE 36

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR JOB TRAINING FOR SAMPLE
(high school seniors)

JOB GROUP	FIRST CHOICE NO. IN SAMPLE	FIRST CHOICE PCT	SECOND CHOICE NO. IN SAMPLE	SECOND CHOICE PCT	THIRD CHOICE NO. IN SAMPLE	THIRD CHOICE PCT	WEIGHT PCT
Agriculture	43	9.25	10	2.51	8	2.33	6.20
Office and Accounting	106	22.80	51	12.81	30	8.75	17.76
Communications	28	6.02	36	9.05	33	9.62	7.46
Construction	33	7.10	36	9.05	26	7.58	7.77
Consumer Homemaking	17	3.66	38	9.55	34	9.91	6.35
Environment	14	3.01	13	3.27	18	5.25	3.39
Entertainment	15	3.23	26	6.53	32	9.33	5.09
Health	75	16.13	28	7.04	9	2.62	11.44
Hospitality	5	1.08	21	5.28	24	7.00	3.20
Manufacturing	4	.86	6	1.51	6	1.75	1.18
Personal Service	15	3.23	27	6.78	20	5.83	4.70
Public Service	48	10.32	49	12.31	37	10.79	11.01
Transportation	23	4.95	26	6.53	33	9.62	6.08
Sales and Marketing	39	8.39	31	7.79	33	9.62	8.37
Other	0	.00	0	.00	0	.00	.00
TOTAL	465	100.00	398	100.00	343	100.00	100.00

TABLE 37

SUMMARY TABLE ON GENERAL PROGRAM INTEREST
FOR JOB TRAINING FOR POPULATION
(high school seniors)

JOB GROUP	POPULATION ESTIMATE FIRST CHOICE	POPULATION ESTIMATE SECOND CHOICE	POPULATION ESTIMATE THIRD CHOICE
Agriculture	295	68	54
Office and Accounting	728	350	206
Communications	192	247	226
Construction	226	247	178
Consumer Homemaking	116	261	233
Environment	96	89	123
Entertainment	103	178	219
Health	515	192	62
Hospitality	34	14[illegible]	164
Manufacturing	27	4[illegible]	41
Personal Service	103	185	137
Public Service	329	336	254
Transportation	158	178	226
Sales and Marketing	268	213	226
Other	0	0	0
TOTAL	3,190	2,729	2,349

TABLE 38

SUMMARY TABLE OF SPECIFIC JOBS OF INTEREST
FOR MORE JOB TRAINING
(high school seniors)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Professional, Technical, and Kindred Workers	192	51.75
Accountants	27	
Architects	1	
Computer Programmers	5	
Computer Specialists, N.E.C.	1	
Civil Engineers	1	
Electrical and Electronic Engineers	1	
Metallurgical and Materials Engineers	1	
Engineers, N.E.C.	4	
Foresters and Conservationists	3	
Home Management Advisors	1	
Lawyers	2	
Agricultural Scientists	1	
Biological Scientists	2	
Marine Scientists	1	
Physicists and Astronomers	1	
Life and Physical Scientists, N.E.C.	1	
Chiropractors	1	
Dentists	3	
Pharmacists	2	
Physicians, Medical and Osteopathic	14	
Veterinarians	3	
Dietitians	1	
Registered Nurses	23	
Therapists	3	
Clinical Laboratory Technologists & Technicians	3	
Dental Hygienists	3	
Health Technologists & Technicians, N.E.C.	4	
Religious Workers, N.E.C.	1	
Economists	3	
Political Scientists	1	
Psychologists	1	
Social Workers	7	
Recreation Workers	1	
Mathematics Teachers	1	
Social Science Teachers, N.E.C.	1	
Art, Drama, & Music Teachers	2	
Coaches and Physical Education Teachers	1	
Home Economics Teachers	1	
Trade, Industrial, & Technical Teachers	1	

TABLE 38 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Professional, Technical, and Kindred Workers (continued)		
Teachers, College & University Subject Not Spec.	2	
Elementary School Teachers	2	
Teachers, except College & University, N.E.C.	9	
Draftsmen	2	
Electrical & Electronic Engineering Tech	3	
Engineering & Science Technicians, N.E.C.	2	
Air Traffic Controller	1	
Radio Operator	1	
Vocational & Educational Counselors	3	
Actors	1	
Authors	2	
Dancers	1	
Designers	2	
Editors & Reporters	7	
Musicians & Composers	3	
Painters & Sculptors	7	
Photographers	6	
Radio & Television Announcers	2	
Writers, Artists, & Entertainers, N.E.C.	2	
Managers and Administrators, except Farm	29	7.82
Bank Officers & Financial Managers	5	
Buyers & Shippers, Farm Products	1	
Buyers, Wholesale & Retail Trade	1	
Inspectors, except Construction, Public Admin.	1	
Office Managers, N.E.C.	2	
Officials & Administrators; Public Admin, N.E.C.	2	
Purchasing Agents & Buyers, N.E.C.	2	
Restaurant, Cafeteria, & Bar Managers	3	
Sales Managers & Department Heads, Retail Trade	2	
School Administrators, Elementary & Secondary	1	
Managers & Administrators, N.E.C.	9	
Sales Workers	7	1.89
Insurance Agents, Brokers, & Underwriters	2	
Salesmen & Sales Clerks, N.E.C.	5	
Clerical and Kindred Workers	45	12.13
Bookkeepers	5	
Counter Clerks, except Food	4	
Receptionists	1	
Secretaries, Legal	1	
Secretaries, Medical	3	

TABLE 38 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Clerical and Kindred Workers (continued)		
Secretaries, N.E.C..	30	
Typists.	1	
Craftsmen and Kindred Workers	36	9.70
Carpenters	9	
Cranemen, Derrickmen, & Hoistmen	1	
Decorators & Window Dressers	1	
Dental Laboratory Technicians.	1	
Electricians	3	
Locomotive Engineers	1	
Automobile Mechanics	6	
Heavy Equipment Mechanics, includes Diesel	8	
Household Appliance-Accessory Installers, Mech	2	
Radio & Television Repairmen	2	
Plumbers & Pipe Fitters.	2	
Operatives, except Transportation	4	1.08
Blasters & Powdermen	1	
Drillers, Earth.	1	
Dewers & Stichers.	2	
Transportation Equipment Operatives	4	1.08
Deliverymen & Routemen	4	
Laborers, except Farm	3	.81
Animal Caretakers, except Farm	1	
Construction Laborers, except Carpenters' Helpers.	2	
Farmers and Farm Managers	16	4.31
Farmers (owners & tenants)	16	
Service Workers, except Private Household	34	9.16
Cooks, except Private Household.	1	
Waiters.	1	
Dental Assistants.	1	
Nursing Aides, Orderlies, & Attendants	1	
Practical Nurses	11	
Attendants, Recreation & Amusement	1	
Child Care Workers, except Private Households.	1	
Hairdressers & Cosmetologists.	4	
Housekeepers, except Private Household	2	
Welfare Service Aides.	4	
Policemen & Detectives	7	

TABLE 38 (continued)

OCCUPATION	NUMBER IN SAMPLE	PERCENT OF REPORTED
Private Household Workers	1	.27
Child Care Workers, Private Household.	1	
TOTAL	371	100.00

TABLE 39

SUMMARY TABLE ON INTEREST IN MORE EDUCATION
(high school seniors)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	540	94.08	3,710
No	34	5.92	233
TOTAL	574	100.00	3,943

TABLE 40

SUMMARY TABLE ON WHEN MORE EDUCATION
COULD BE ATTENDED
(high school seniors)

TIME	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Weekend	32	6.44	234
Night	148	29.78	1,081
Night or Weekend	45	9.05	329
Day	209	42.05	1,526
Day or Weekend	7	1.41	51
Day or Night	30	6.04	219
Day or Night or Weekend	26	5.23	190
TOTAL	497	100.00	3,630

TABLE 41

SUMMARY TABLE ON HINDRANCES TO ATTENDING MORE EDUCATION
(high school seniors)

HINDRANCES	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Distance (too far)	133	26.82	995
Inconvenient Time	165	33.27	1,234
Requirements Too High	38	7.67	284
Cost Too High	174	35.08	1,301
Requirements of Job	140	28.23	1,047
Family Obligations	34	6.86	254
Stable Income	22	4.44	164
Lack of Transportation	71	14.32	531
Not Informed	134	27.02	1,002
Other	32	6.46	240
TOTAL	496		

[a]This sum represents the number of respondents. It is not the sum of the column since multiple responses were accepted.

TABLE 42

SUMMARY TABLE ON DISTANCE WILLING TO TRAVEL
FOR THOSE WITH A TRANSPORTATION HINDRANCE
(high school seniors)

DISTANCE	NUMBER IN SAMPLE	PERCENT
1 - 10 miles	18	31.04
11 - 20 miles	13	22.41
21 - 30 miles	10	17.24
31 - 40 miles	3	5.17
Over 40 miles	14	24.14
TOTAL	58	100.00

TABLE 43

SUMMARY TABLE ON NEED FOR HELP
TO DETERMINE EDUCATIONAL NEED
(high school seniors)

NEED	NUMBER IN SAMPLE	PERCENT	POPULATION ESTIMATE
Yes	254	44.25	1,744
No	320	55.75	2,199
TOTAL	574	100.00	3,943

the project, a log was maintained to record problems and suggestions for improvement. Finally, to evaluate the questionnaire itself, separate assessments were made of the validity and stability of responses. The results of the procedural evaluation are reported in this section.

Time Requirements

One type of resource used to conduct an assessment of this kind is the time of the local project director and secretarial assistance. Time used at the project site was monitored for each project activity. The staffing pattern involved the hiring of one half-time project director, one half-time secretary, and miscellaneous clerical help during peak periods. Tables 44 and 45 show the time spent per activity at the pilot site to conduct the assessment of the population sub-group who were over high school age. Time is reported in total hours per activity, and minutes per household surveyed for each activity. Results shown in Table 44 indicate that the director spend 388 hours in conducting the household survey or approximately 6.5 minutes per household. Table 45 shows that 348 hours of secretarial time plus 250 hours of miscellaneous clerical help were used; average time per household was 10 minutes. Combining the time for the project director and secretarial assistance, a total of about 16 minutes per household surveyed was required in using the procedures as developed.

About 35 hours of additional director's time was spend to acquire responses from high school seniors. No clerical or

TABLE 44

LOCAL PROJECT DIRECTOR'S TIME USE
PER ACTIVITY FOR HOUSEHOLD SURVEY

ACTIVITY	TOTAL TIME (HOURS)	TIME PER HOUSEHOLD (MINUTES)
Public relations	20	.33
Training	12	.20
Identify sample segment	8	.13
Acquire household names and addresses	40	.67
Coding	60	1.00
Telephoning non-respondents	35	.58
Mailing	42	.70
Administrative (organize staff, solve proglems, locate documents, etc.)	171	2.84
TOTAL	388	6.45

TABLE 45

SECRETARIAL ASSISTANCE TIME USE PER ACTIVITY
FOR HOUSEHOLD SURVEY

ACTIVITY	TOTAL TIME (HOURS)		TIME PER HOUSEHOLD (MINUTES)
	SECRETARY	ADDITIONAL HELP	
Identify sampling segment	50	--	.83
Find household names and addresses	70	--	1.17
Type address stickers	55	20	1.25
Mailing (apply stickers and stamps, stuffing)	40	224	4.40
Coding - premail	5	--	.08
Coding - keypunch	28	--	.47
Telephoning non-respondents	100	6	1.77
TOTAL	348	250	9.97

emergency assitance was used to accomplish this activity.

Cost Requirements

Costs for various types of resources used in conducting the study at the project site were also monitored. Costs included those for assessment of both sub-groups of the population which were studied in Region 4. Cost for each type of resource is shown in Table 46. As can be seen, the largest cost item is staff time, approximately 70 percent of total cost.

TABLE 46

COST REQUIREMENTS FOR ASSESSMENT STUDY

RESOURCE TYPE	COST	PERCENT OF TOTAL COST
Supplies (folders, labels, binders, etc.)	$ 907	8.62
Postage (stamps, envelopes, etc.)	1,461	13.91
Personnel	7,303	69.37
Personnel - Director	5,481	52.00
Personnel - Secretaries	1,306	12.41
Personnel - overload assistance	516	4.90
Telephone	857	8.10
TOTAL	$10,528	100.00

Analysis of total costs was made to separate the cost of the assessment of high school seniors and those over high school age (i.e., household survey). For those over high school age, the resulting cost for each resource on a per household basis is shown in Table 47. As shown in this table, the cost per household was approximately $3.00.

It should be noted that roughly 3% of the total cost ($316.00) was expended in acquiring responses for the group of high school seniors. These expenditures involved cost related to travel and telephone expenses, postage, and time used by project director to administer and code the questionnaires.

TABLE 47

COST REQUIREMENTS PER HOUSEHOLD FOR HOUSEHOLD SURVEY

RESOURCE TYPE	COST PER HOUSEHOLD
Supplies (folder, labels, binders, etc.)	$ .25
Postage (stamps, envelopes, etc.)	.41
Personnel (director, clerical, assistants)	2.03
Telephone	.24
TOTAL	$2.93

Procedural Problems and Suggestions for Improvement

Project staff at the study site were asked to keep a log of problems incurred during the study, and a de-briefing was held with the staff after completion of the project to review problems with the procedure and obtain suggestions for improvement.

The problems incurred in implementing project procedures were as follows:

1. Some of enumeration districts shown on maps, particularly for cities, did not have households (e.g., turned to freeways or underwater).

2. Some of households indicated in the Platt Book and rural county directories were summer homes without residents.

3. There were some inconsistencies between Census enumeration districts and those shown on maps available.

4. Identifying household names and addresses in small rural communities was the most difficult and time-consuming task.

5. It became necessary to pick households from

both sides of the street in metropolitan areas because there were less than six households along one side of many blocks.

6. There was a delay in receipt of forms to record households to be included in the sample.

7. There was a delay in receipt of some city maps of use in identifying blocks and households to be selected for the sample.

8. In rural areas, the mail is delivered by name of resident rather than address; box numbers should be assigned on rural routes but it is difficult to do this because no composite list of box numbers was located.

9. Many questionnaires were returned by senior citizens without completing them; evidently the cover letter was not explicit enough.

10. Graduating high school seniors in the high school survey were often confused about when they could attend educational programs; they asked if the questionnaire meant "now" or "after leaving high school".

11. It appeared that from some households, respondents answered questionnaires in an identical manner as if filled out by one household member.

12. Some of the respondents picked more than one response for Question D and F on the questionnaire concerning reason for wanting more education. Clearer directions may be needed.

13. Some respondents thought that educational programs being asked about on the questionnaire were only going to be located at Fergus Falls.

14. Some respondents indicated that some of their responses would be based on the season during the year (e.g., fall, winter) that the educational programs would be offered.

15. Some respondents though that survey was a solicitation for programs presently being offered or anticipated to be started in the near future.

Suggestions for procedure improvement from site staff were as follows:

1. Returned questionnaires can be coded for identification of household members immediately upon opening the returned envelope.

2. Place codes on the questionnaire before being sent, so that one can tell more accurately if the returned questionnaire was from the first, second, or third mailing.

3. If project director is required to have secretarial skills, it may be more efficient to dispense with a secretarial assistant and only hire clerical assistance during peak activity periods.

4. Hire additional help for peak activity periods (e.g., mailings).

5. Insist on using stamps and first class mail for sending questionnaires rather than bulk permit.

6. County assessor files were a good source of names and addresses of households included in the sample.

7. Experiment with types of filing methods other than three-ring binders.

Validity of Responses

Validity refers to whether or not the questionnaire is measuring what it was intended to measure. With the needs assessment questionnaire used in this study, the primary intent was to measure the perceived interest of respondents in various kinds of educational programs. In order to assess what was really meant when respondents indicated they were "interested" in various kinds of programs, a supplementary questionnaire was developed, and a small sample of respondents were recontacted to obtain needed information. The questionnaire was designed to obtain an indication of the "degree" of interest respondents held for their first, second, and third choices of program areas

(see questions E and G or the questionnaire in Appendix VII). The degrees of interest were stated in terms of what was considered to be an increasing level of commitment to actually attend an educational program. The levels of interest were as follows (a copy of the complete questionnaire and cover letter is shown in Appendix IX):

1. I would be willing to consider a course or program of this kind, but don't send me specific information at this time.

2. I would be willing to be sent information about available courses or programs.

3. I would be willing to list my name as a potential student.

4. I would be willing to attend one meeting with other interested individuals to help plan the course or programs.

5. I would be willing to recruit others to enable the class to be offered.

6. I would be willing to secure a place in a course of this kind by paying a small fee now which will not be refunded.

The sample of respondents for the validity assessment was drawn from those who, as a result of the first and second mailing of the questionnaire, indicated they were interested in more education for either or both hobbies and special interests or job training. Efforts were make to choose respondents so that all types of program interests were represented in the sample. A total of 323 individuals comprised the sample of which 70 percent responded after two mailings and a telephone follow-up.

Results of the analysis of responses is shown in Tables 48 and 49 for interest in hobbies and special interest and job training, respectively. The table format indicates for the rank order of program choices (i.e., first, second, and third from originally returned questionnaire), the percent of responses for each level of interest. In both tables, the level of interest is consistent with order of choice; that is, more responses were given for the higher level of interest response categories (e.g., willing to recruit others, and willing to pay small fee to secure place) for the first choice program area as compared to second and third choice programs. This

TABLE 48

LEVEL OF INTEREST FOR HOBBIES AND SPECIAL INTEREST EDUCATIONAL PROGRAMS IN ORDER OF CHOICE

LEVEL OF INTEREST	ORDER OF CHOICE 1	2	3
Willing to consider but don't send information	28.02%	41.70%	48.89%
Willing to be sent information	33.05	30.77	30.00
Willing to list name	16.25	14.98	11.12
Willing to help plan	10.36	7.28	4.44
Willing to recruit	7.00	3.24	3.89
Willing to secure place	5.32	2.03	1.67
TOTAL RESPONSES	100.00	100.00	100.00

Note. Numbers are expressed as a percent of total responses for each column

TABLE 49

LEVEL OF INTEREST FOR JOB TRAINING PROGRAMS IN ORDER OF CHOICE

LEVEL OF INTEREST	ORDER OF CHOICE 1	2	3
Willing to consider but don't send information	24.31%	34.96%	48.92%
Willing to be sent information	35.06	30.77	28.26
Willing to list name	17.53	17.49	14.13
Willing to help plan	10.35	9.08	7.61
Willing to recruit	7.57	3.50	1.08
Willing to secure place	5.18	4.20	-----
TOTAL RESPONSES	100.00	100.00	100.00

Note. Numbers are expressed as a percent of total responses for each column.

result indicates that the level of choice aspect of the questionnaire was working; programs indicated to be of higher order choice were at a higher level of interest.

A second finding from the data was that the first choice program usually meant a level of interest somewhere between "willing to consider a course or program of this kind, but don't send me specific information at this time" and "willing to list my name as a potential student" with the most frequent response being "willing to be sent information about available courses or programs". Second and third choice programs meant levels of interest relating to the first two response categories shown in Table 48 and 49 with the most frequent response being "willing to consider a course or program of this kind, but don't send me specific information at this time". Obvious from Tables 48 and 49 were the small response rates from the high interest response categories.

Stability of Responses

Stability refers to a measurement of the degree to which the responses, and therefore the measurement, remain the same over time. To test this aspect of the responses, a small sub-sample of the full sample of households was again drawn and re-contacted approximately three months after their first contact. The sub-sample consisted of 200 individuals who were drawn to represent both those who had and had not indicated an interest in more education and, for those who had indicated an interest, represented all types of program interests. The sample was also drawn to avoid overlap with the sample drawn for the validity assessment described previously.

After two mailings, a total of 41 percent or 83 individuals had returned responses. The percent of respondents who had the same responses on the initially returned questionnaire and the identical questionnaire administered three months later is shown for each major question in Table 50.

As is apparent from Table 50, the responses were fairly stable over the three month period -- averaging at about 80 percent having the same response at both time periods. Lowest stability was in the area of hindrances to program attendance. A difference between need for more education for hobbies and special interest as compared to job training shows up on the question related to program area of interest -- the latter being

more stable (87%) than the former (69%). On the questions of need for more education for hobbies and special interests and job training, there was about an equal number of respondents who changed from "Yes" to "No" as from "No" to "Yes".

TABLE 50

STABILITY OF QUESTIONNAIRE RESPONSES
OVER A THREE MONTH INTERVAL

QUESTION	PERCENT WITH SAME RESPONSES
Working at Present	94%
Reason For Not Working or Working Less Than Desired	83%
Need For More Education For Hobbies and Special Interests	78%
Reasons For Needing More Education For Hobbies and Special Interests	82%
Program Area of Interest For Hobbies and Special Interests	69%
Need For More Education For Job Training	82%
Reasons For Needing More Education For Job Training	82%
Program Area of Interest For Job Training	87%
Time of Attendance	71%
Hindrance To Program Attendance	62%

CHAPTER IV

CONCLUSIONS

The conclusions for this study will be focused on the major goals proposed for the project in Chapter I. The first section will concentrate on the responses to key questions which were to be answered by the data collected using the developed assessment procedure. The second section will address the issue of the effectiveness and efficiency of the procedure itself. Before reading this chapter, reviewing the "Limitations of Information" section in Chapter I may be helpful in drawing implications from the results.

PEOPLE'S NEED FOR ADDITIONAL EDUCATION IN ECONOMIC DEVELOPMENT REGION 4

How Many Want Additional Education?

There is a substantial group of individuals residing in Economic Development Region 4 who are interested in additional education. This number is about 18,600 (16%) for programs related to hobbies and special interests and 12,500 (11%) for those related to job training for residents who are over high school age. For high school seniors in the West Central Region, approximately 3,300 (83%) are interested in programs related to hobbies and special interests and 3,400 (85%) for those programs related to job training.

Why is Additional Education Needed?

There is a diversity in the purpose for which individuals want additional job training. For West Central Region residents over high school age, the major reason for needing programs related to hobbies and special interests is for self improvement -- about 53 percent of those interested. The other half of residents over high school age needed the additional education for better use of leisure (22%) and to save money by doing something themselves (25%). A very similar distribution of reasons for needing more education for hobbies and special interests exists for high school seniors.

Major reasons identified by residents over high school age for needing more education for job training was for retraining for a different, unrelated job (21%), preparing for a promotion (18%), and updating to do better at or keep a present job (25%). In contrast, the major reasons for job training by high school seniors were preparation for a first job (31%) and retraining for a different unrelated job (28%).

What Type of Additional Education is Needed?

All hobbies, special interests, and occupational areas are represented in the educational interests of West Central Region residents. A weighted average of the first, second, and third choice, expressed as a percentage for the two population sub-groups (i.e., those over high school age, and high school seniors) provided the following desired program mix for hobbies and special interest and job training:

Hobbies and Special Interests	Residents Over High School Age	High School Seniors
Basic Skills	6.3%	6.0%
Arts and Crafts	20.7%	12.7%
Music	7.7%	13.7%
Recreation	12.9%	27.7%
Home Skills	17.8%	13.0%
Technical	25.6%	20.9%
Liberal	8.8%	5.8%
Job Training		
Agriculture	12.0%	6.2%
Office and Accounting	17.1%	17.8%
Communications	4.7%	7.5%
Construction	9.5%	7.8%
Consumer Homemaking	5.9%	6.3%
Environment	1.7%	3.4%
Entertainment	2.3%	5.1%
Health	12.0%	11.4%
Hospitality	2.1	3.2%
Manufacturing	2.6%	1.2%
Personal Service	3.5%	4.7%
Public Service	14.1%	11.0%
Transportation	2.1%	6.1%
Sales and Marketing	7.5%	8.4%

There are several differences between desired program mix for hobbies and special interests by residents over high school age and high school seniors. Residents over high school age have more preference for the program areas of arts and crafts, home skills, and technical and liberal education. High school seniors showed more preference for music and recreation programs.

In the area of job training, the program mix preference was very similar between high school seniors and residents over high school age. The major difference was for agriculture programs where the residents over high school age have a higher preference. The program areas with highest preference were office and accounting; public service; health; and in the case of the residents over high school age, agriculture.

When Could Additional Education Be Attended?

Programs must be provided at different times during the day as well as all during the week and weekends if they are to be "available" to residents of the West Central Region. About four-fifths of the residents over high school age could attend only during nights or weekends. Night programs were the most popular choice (75%). About 32 percent of residents who were interested in more education and over high school age could attend during the day. High school seniors could attend programs during the day (55%) and 50% could attend at night. About 48 percent of high school seniors could attend programs only during the night or weekend.

What Are Special Barriers to Attendance?

The most frequent barriers to attending more education for residents over high school age who were interested in attending programs are: (1) job does not allow time (36%), (2) program not available in local area (33%), (3) family obligations do not allow time (29%), and (4) program not available at convenient time (27%). Of those with the barrier of distance (i.e., program not available in local area), 19% would be willing to travel only 10 miles or less and 47% would travel more than 20 miles.

For high school seniors interested in more education and who have some barrier to attending programs in the West Central Region, the most common barriers are: (1) cost of attending too high (35%), (2) program not available at convenient time (33%), (3) present job does not allow time (28%), (4) program not available in local area (27%), and (5) never hear about programs being offered and don't know where to find out (27%). Of those with the barrier of distance, 31% would be willing to travel only 10 miles or less and 47% would travel more than 20 miles.

Of those who responded to the survey questionnaire, 4% of the residents over high school age and 44% of high school seniors indicated they would like help in deciding what type of further education they needed.

ASSESSMENT PROCEDURE

The assessment procedure was to be evaluated in terms of its effectiveness and resource requirements in producing the desired information.

Effectiveness

The procedure was evaluated in several ways to determine effectiveness. First, the practical feasibility of the steps in selecting a sample and obtaining a response were monitored. The procedure has been modified based on feedback comments from the site staff, and is described in detail for future use in a separate report.[11] A measure of the effectiveness of the sampling procedure is the representative of the sample compared to the full population. The use of this measure is dependent on getting a high response rate so that differences of sample from population can truly be attributed to the sampling procedure and not response bias. Comparisons were made with 1970 Census of Population data for Region 4 on the characteristics of age, sex, employment status, and occupation; some differences

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[11] Copa, George H. and Maurice, Clyde F. People's Need For Additional Job Training: Procedure For Assessment. Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota: Minneapolis, Minnesota, October, 1976.

are evident but may be attributed to the response rate of less than 100 percent. a previous study[12] with a higher response rate showed a closer correspondentce of sample and population on these attributes.

A measure of the effectiveness of obtaining responses was the 63 percent response rate after three mailings and a telephone follow-up. Feedback comments indicate that this response would have been higher if the study was done in the winter rather than spring or summer, and if stamped envelopes had been used instead of mailing permits in mailing out the questionnaires. The timing of the survey for spring and summer in a rural area conflicted with a particularly busy work schedule for residents at that time.

A check on the validity of the questionnaire in terms of what was meant by being "interested" in more education indicate that residents who indicated an interest wanted to be sent information about available courses and programs. The use of "order of choice" to measure level of interest was confirmed as working to indicate different levels of interest.

Assessment of the reliability or stability of interest was measured by reassessment after three months. About 80 percent of responses remained the same indicating the questionnaire was generating fairly stable information on interest, at least for the short run.

Another test of effectiveness will come in the degree to which information provided by this procedure is used in the process of planning, approving, and implementing educational programs. At this time, it is too early to assess this measure; however, preliminary formal presentations of the data have been made and more presentations are planned.

Resource Requirements

Resource requirements of the procedure were evaluated by monitoring the cost and time required to complete the procedure.

---

[12] Minneapolis Public Schools and Minnesota Research Coordinating Unit for Vocational Education. A Study to Assess Minneapolis Residents Perceived Needs for Job Training. Minneapolis Public Schools: Minneapolis, 1974.

Total cost at the project site amounted to approximately $3.00 per household surveyed. Time, a way of looking at cost from a staffing perspective, amounted to about 16 minutes per household.

SUMMARY

Given the above conclusions, it was apparent that the procedure did provide the information for which it was designed. Answers to all questions set out in the beginning were provided. Second, evaluation of the effectiveness and resource requirements substantiated that the procedure was workable and produced valid and stable responses. An estimate was made of time and cost requirements. Utilization of information provided, as another measure of effectiveness, must continue to be studied in the future. A separate report has been prepared in which the procedure is described in detail for future use by those interested in assessing people's need for additional job training.

APPENDIX I

SCHEDULE OF PROJECT ACTIVITIES

SCHEDULE OF ACTIVITIES

November

Project initiated (11/15/75)
University based staff hired
Prepared criteria and procedure for selecting pilot geographic area

December

Base data completed on potential pilot geographic areas (economic region)
Pre-selection of pilot geographic areas completed
Prepared invitation for "Letter of Interest"
Literature search for related survey questionnaires and procedures

January

"Letter of Interest" received for all (4) economic regions invited to be the pilot geographic area
Selection committee formed to advise on selection of pilot area
Initiated draft of procedure and questionnaire to conduct study

February

Selection committee met and advised selection of Region 4
Visit made to West Central Regional Development Commission Office to explain project
West Central Regional Development Commission approved participation in project
Continued development of procedure and questionnaire

March

Sub-contract with West Central Region prepared and approved
Visit with pilot area staff to review study procedure
Meet with representative of post-secondary educational agencies in area to review project and questionnaire; revised questionnaire prepared

April

Pilot area staff hired
Second meeting with representatives of post-secondary education agencies to review revised questionnaire
Training sessions conduct with site staff on selecting sample and preparing for mailings
Eighty percent of sample selection completed

May

Selection of sample completed (3,600 households) with names, addresses, telephone numbers
Mailing labels prepared
Contact made with largest high school in each county of region to get questionnaire administered to graduating seniors; completed later in months
Questionnaires printed and delivered
First and second mailings completed
Site visit (3) made to monitor procedure and trouble shoot
Meet with Manpower Advisory Committee for West Central Region to explain project
Procedures and questionnaires for reliability and validity assessment were developed
Coding procedure for questionnaires completed

June

Third mailing to households completed
Initiated telephone calls to non-respondents
Site visit to instruct in coding procedures, validity and reliability study, telephone procedures
Coding of questionnaires initiated

July

Completion of telephone contact
Complete validity study
Complete coding of questionnaires
Develop computer program to analyze questionnaires; begin analysis

August

Complete analysis of data
Initiate stability study

September

Complete stability study
Meet with site staff to assist in interpretation of data and obtain evaluation of procedure
Write and disseminate final report and description of procedure

APPENDIX II

LETTER OF INVITATION TO POTENTIAL PROJECT SITES

UNIVERSITY OF MINNESOTA
TWIN CITIES

Minnesota Research Coordinating Unit
Department of Vocational and Technical Education
College of Education
145 Peik Hall
Minneapolis, Minnesota 55455

January 6, 1976

Mr. John Sem
Executive Director
Region 4 Development Commission
Administration Building
Fergus Falls Community College
Fergus Falls, Minnesota 56537

Dear Mr. Sem:

For the past several years, the Minnesota Research Coordinating Unit for Vocational Education (RCU) located at the University of Minnesota, has been conducting a research and development program focused on planning vocational training programs in Minnesota. Research and development efforts have produced a procedure and materials to: (1) follow-up training program leavers, (2) ease the transition from secondary school to work or further education, (3) identify alternative sources of training for various occupations, (4) assess the perceived needs of youth and adults for additional job training, and (5) predict future occupational demand in Minnesota.

In November, 1975, the RCU received a project grant from the Governor's Manpower Office as recommended by the State Manpower Council under the authority of the Comprehensive Employment and Training Act of 1973, Public Law 93-203, Title I, Section 103 (e) and Section 106 (c), Special Grant to the Governor-4%. The title of the project is "Peoples' Need for Additional Job Training". The purpose of the project is to pilot test and develop a procedure to identify the perceived needs of people in a given geographic area for additional job training or related services. This information should serve as one critical input in planning the size and mix of training programs and related services to be provided through agencies such as CETA and public schools. The project will use the results and experience of past efforts by the RCU at gathering information of this kind.

The procedure to collect the above information is to be developed and tried-out in cooperation with a selected CETA prime sponsor or prime sponsor sub-region to insure that it is workable and produces useful information. This letter is to determine if the Region 4 Development Commission is interested in being the pilot region for the project.

Cooperation in the project will involve several responsibilities as well as potential benefits. As responsibilities, the pilot region will have to: (1) review and discuss data collection procedures and forms (including

access to and reaction from your manpower planning or advisory committee), (2) assist in securing and supervising a local project director and secretarial assistant (the project will provide the financial resources to pay for the local project director's and secretarial assistant's time, and the cost of data collection; it is estimated that the project will require a 1/2 time project director and 1/2 time secretary for 6 months), and (3) provide the space and equipment necessary for the local project director and secretarial assistant (i.e., office, desk, telephone, typewriter). The potential benefits of serving as the pilot region are: (1) having comprehensive information about the perceived need for job training and related services by residents of your region, and (2) provision of the information at a small relative cost to you since much of the direct costs of collecting the information will be borne by the RCU in this pilot effort. The information provided will be unique in that it represents input from consumers about their needs and desired services. Because a representative sample of the total regional population is surveyed, the information will be useful to several agencies providing human resource development services in the region and to those responsible for planning and coordinating such services to insure their comprehensiveness.

If your region is interested in cooperating on this project, please submit a "Letter of Interest" by January 27, 1976. This letter should be addressed to:

George H. Copa
Minnesota Research Coordinating Unit for Vocational Education
Peik Hall 145
University of Minnesota
Minneapolis, Minnesota 55455

The criteria which will be used to select the pilot region from those interested are described on the attached page. You have been selected to receive this letter because, from our information, you already meet some of the criteria specified, namely: (1) represent a rural area, (2) have a regional population of less than 200,000, (3) have base data available about the characteristics of the population in the region, (4) are a CETA prime sponsor or sub-region with an operating manpower planning council or manpower advisory committee, and (5) have had a manpower planner on staff for a least 6 months. The "Letter of Interest" should confirm our information pertaining to criteria one through four and specifically address criteria five (last part) and six, since these are items of information that we do not know. If you have questions, please call me at (612) 373-3838 or Barbara Homce (our project officer) at the Governor's Manpower Office at (612) 296-6063.

Sincerely,

George H. Copa
Associate Professor and
Project Director

GHC:mrf

Enclosures

cc: Bill Scharf

CRITERIA FOR SELECTION OF PILOT CETA PRIME SPONSOR OR PRIME SPONSOR SUB-REGION

Criteria	Justification
1. Represent a rural area (i.e., population density less than 100 persons per square mile)	--Preference for a prime sponsor from a rural area of Minnesota was specified in the approved Project Application to GMO --Information about the procedures, workability, and data generated is already available for a large metropolitan area (from Minneapolis study)
2. Population of geographic area under 200,000	--Need to obtain sufficient sampling intensity for valid generalization to population of area --Funding limited to estimate of about 3,500 households based on cost of data collection
3. Base descriptive data available on population of the geographic area (i.e., size of population, age distribution, income, sex, occupations held, number of households)	--Need accurate base data to validate sample and to generalize to full population
4. Geographic area is a prime sponsor or prime sponsor sub-region (i.e., has operating manpower planning council or manpower advisory committee, does planning as an entity)	--Procedure being developed is to be feasible and useful in providing information to do planning and support a plan
5. Ability to provide assistance to project (i.e., manpower planner available, can assist in hiring a project director and secretarial assistant, willing to share responsibility for management of project, can house project staff, access to manpower planning/ advisory committee)	--Success of project will depend on cooperation and support at local prime sponsor level
6. Have interest in and can benefit from the outputs of the project (i.e., really want to do project, can see immediate uses of data)	--Success of project again depended on local involvement and their view of potential benefits

APPENDIX III

PROJECT SITE SELECTION ADVISORY COMMITTEE

PROJECT SITE SELECTION ADVISORY COMMITTEE

Ms. Barbara Homce, Governor's Manpower Office, Division of State Wide Coordinative Services

Dr. Paul Thomas, State Manpower Council, State Agency Representative for Higher Education Coordinating Board

Mr. Richard Thorpe, State Manpower Council, Prime Sponsor Representative, Manpower Director, St. Paul Prime Sponsor

Dr. Brandon Smith, Director, Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota

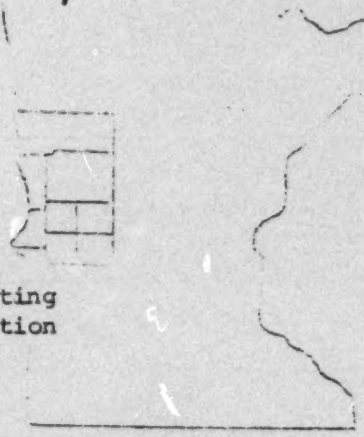
APPENDIX IV

LETTER OF INTEREST IN BEING PROJECT SITE

West Central Regional Development Commission

Fergus Falls Community College
Administration Building

Fergus Falls, Minnesota 56537
Phone: 218-739-3356



January 19, 1976

Mr. George H. Copa
Minnesota Research Coordinating
Unit for Vocational Education
145 Peik Hall
University of Minnesota
Minneapolis, MN 55455

Dear Mr. Copa:

The West Central Commission is interested in working with you on the "People Needs' for Additional Job Training" project that you propose to conduct in rural Minnesota.

The following statements are presented to confirm the criteria for selection of a pilot area:

1. West Central is a rural region; only two cities within the region have populations of more than 10,000. Only 1/3 of the regional population is classified as urban.

2. West Central Minnesota covers approximately 86,000 square miles and has a population of approximately 185,000 people.

3. The West Central Commission collects and disseminates a substantial volume of data and is publishing an up-date of population information for general distribution.

4. The West Central Commission has been sub-granted the manpower planning responsibility by the Minnesota Concentrated Employment Program since April of 1974. A Manpower Advisory Committee has been formed and has been active since June of 1974.

5. The West Central Commission has a full-time manpower planner and has the ability to hire additional help necessary to complete the project.

6. The West Central Board of Directors and the Manpower Advisory Committee have expressed interest in your project. Data collected from such a study would be extremely valuable for our manpower and economic development programs. In addition, the Wes Min Consoritum, a consortium of area vocational and higher educational institutions in Region IV, has expressed interest and support for such a project. The Commission's working relationships with area schools would be invaluable to your project.

Mr. George H. Copa
Minnesota Research Coordinating
Unit for Vocational Education
145 Peik Hall
University of Minnesota
Minneapolis, MN 55455

Page 2...

If I can be of further assistance, please contact me.

Sincerely,

John Sem

John Sem
Executive Director

JS/cb

APPENDIX V

ADVISORY GROUP FOR QUESTIONNAIRE DEVELOPMENT

ADVISORY GROUP FOR QUESTIONNAIRE DEVELOPMENT

Mr. Shuman Mandt
Director of Concerted Service
221 1/2 Jefferson Street SW
Wadena, MN 56482

Mr. Bill Scharf
Manpower Planner
West Central Regional Development Commission
Fergus Falls, MN 56537

Mr. Cal Heine
Dean of Instruction
Fergus Falls Community College
Fergus Falls, MN 56537

Mr. A. A. "Cap" Paciotti
Director, Continuing Education
Alexandria High School
Alexandria, MN 56308

Mr. Roger McCannon
Director, Division of Continuing Education
University of Minnesota - Morris
Morris, MN 56267

Mr. Roger H. Spilde
Chairman, Department of Economics
Concordia College - Moorhead
Moorhead, MN 56560

Mr. John Sem
Executive Director
West Central Regional Development Commission
Fergus Falls, MN 56537

Ms. Karen Peterson
West Central Regional Development Commission
Fergus Falls, MN 56537

Mr. Larry Jines
Director, Division of Continuing Education
Moorhead State College
Moorhead, MN 56560

APPENDIX VI

COUNTY DISTRIBUTION OF SAMPLE OF HIGH SCHOOL SENIORS AND HOUSEHOLDS

COUNTY DISTRIBUTION OF SAMPLE OF
HIGH SCHOOL SENIORS AND HOUSEHOLDS

COUNTY	NUMBER OF HIGH SCHOOL SENIORS SAMPLED	NUMBER OF HOUSEHOLDS SAMPLED
Becker	40	534
Clay	161	768
Douglas	57	444
Grant	34	156
Otter Tail	69	1,032
Pope	60	216
Stevens	85	180
Traverse	40	120
Wilkin	28	156
TOTAL	574	3,606

APPENDIX VII

QUESTIONNAIRE AND COVER LETTERS

FIRST MAILING

West Central Regional Development Commission

Fergus Falls Community College
Administration Building

Fergus Falls, Minnesota 56537
Phone: 218-739-3356

Dear Douglas County Resident:

Would you or members of your household like more education for hobbies, special interests or job preparation? The schools in this area need your help in deciding what courses or programs would be of most interest and benefit to you and members of your household.

In an effort to reduce the costs involved in doing this survey, only a limited number of households in the county are being contacted. For this reason, it is essential that we receive a reply from you if our results are to be accurate. We trust that you will help in planning the educational programs that are needed by you and other residents of this area who will not be contacted.

We ask that each person who is out of high school and living in your household fill out one copy of the enclosed forms. When a form has been completed by each of these members of the household, return them to us in the enclosed stamped, self-addressed envelope. If at all possible, please complete and mail the form to us in the next few days.

This survey is being conducted by the Regional Manpower Advisory Committee of the West Central Regional Development Commission. All information is considered confidential, and will only be released as summary information. You perhaps noticed that each form is numbered. This number is used only to identify your household for our own records during this survey.

If you have any questions about the form or the survey, please call 739-3356 between 8:00 A.M. and 4:30 P.M. and ask for Karen Peterson or Bill Sharff. Thank you for your help in determining what kinds of educational programs will interest and benefit the people in this area.

Sincerely,

Gordon R Bopp

GORDON BOPP, Chairman
Regional Manpower Advisory Committee

GB/rn

Enclosure

106

☐☐☐☐☐☐ (1-10)

YOUR INTEREST IN MORE EDUCATION – HOBBIES, SPECIAL INTERESTS, OR JOB TRAINING

A. What is your age?_____years (11-12)

B. What is your sex?_____male _____female (13)

C. If you are working at present, what is your job?_____ ☐☐ (14-15)
(For example: teacher, farmer, secretary, homemaker)

If you are not working at present or are working less time than desired, what is the reason? Check all that apply.

_____ 1. In school (17)
_____ 2. Retired (18)
_____ 3. Cannot find more work (19)
_____ 4. Do not want more work (20)
_____ 5. Other reason, explain:_____ (21)

D. Do you want more education for hobbies or special interests for any of the following reasons? Check the one most important reason or check "do not want." ☐ (22)

_____ 1. Better use of my leisure time.
_____ 2. Save money by doing it myself.
_____ 3. General self-improvement.
_____ 4. Do not want more education for hobbies or special interests (skip question E, go to F).

E. For the reason checked in Question D above, what type of programs would you like? Indicate your first choice with a "1," your second choice with a "2," and your third choice with a "3."

_____ 1. Basic skills (examples: refresher math, basic English) ☐ (23)
_____ 2. Arts and crafts (examples: oil painting, art, leather tooling)
_____ 3. Music (examples: guitar, banjo, piano)
_____ 4. Recreation (examples: camping, bridge, dancing) ☐ (24)
_____ 5. Home skills (examples: quilting, flower arrangement, gourmet cooking)
_____ 6. Technical (examples: home remodeling, auto repair, plumbing, electrical wiring)
_____ 7. Liberal (examples: history, economics, foreign language) ☐ (25)
_____ 8. Other type, explain:_____

IMPORTANT

For the choice checked "1" in Question E above, describe in detail the actual topic you had in mind. Examples: refresher math, guitar, plumbing, history.

_____ ☐☐ (26-28)

F. Do you want more job or employment related training for any of the following reasons? Check the one most important reason or check "do not want."

_____ 1. Prepare for my first job.
_____ 2. Prepare for a job which is unrelated to a job I have or have had. (29)
_____ 3. Prepare to re-enter a job similar to one I had in the past. ☐
_____ 4. Prepare for a job promotion or advancement.
_____ 5. Prepare to do better at or keep my present job.
_____ 6. Prepare for certification, recertification, or licensing.
_____ 7. Do not want more job or employment related training (skip Question G, go to I).

G. For the reason checked in Question F above, what are the job(s) for which you would like to better prepare? Indicate your first choice with a "1," your second choice with a "2," and your third choice with a "3."

_____ 1. Agriculture (examples: farmer, tractor mechanic, feed salesperson, florist)

_____ 2. Office and accounting (examples: secretary, cashier, bookkeeper, accountant, office manager)

_____ 3. Communications (examples: newspaper reporter, photographer, telephone operator, radio repairperson) ☐ (30)

_____ 4. Construction (examples: carpenter, electrician, painter, plumber) ☐ (31)

_____ 5. Consumer homemaking (examples: homemaker, parent)

_____ 6. Environment (examples: water quality technician, air pollution technician, sewage plant worker) ☐ (32)

_____ 7. Entertainment (examples: musician, sound and light technician, backstage hand, actor or actress)

_____ 8. Health (examples: nurse, surgical technician, nursing assistant, dental laboratory technician, doctor)

_____ 9. Hospitality and recreation (examples: maid or houseman, cook, waiter or waitress, dietitian, motel manager, guide, resort worker)

_____ 10. Manufacturing (examples: machinist, assembler, plant manager)

_____ 11. Personal service (examples: barber or cosmetologist, child care worker, tailor, seamstress)

_____ 12. Public service (examples: police staff, teacher, safety inspector, social service worker)

_____ 13. Transportation (examples: truck driver, auto mechanic, service station manager, stewardess, pilot)

_____ 14. Sales and marketing (examples: salesperson, advertising specialist, merchant, appraiser)

_____ 15. Other, explain:_____

IMPORTANT

For the group of jobs checked "1" in Question G, describe in detail the actual job you had in mind for which more training is desired. Examples: secretary, carpenter, farmer, registered nurse.

_____ ☐☐☐

_____ _____ (33-35)

H. When could you attend an educational program? Check as many as you can.

_____ 1. Day (Monday-Friday) (36)

_____ 2. Night (Monday-Friday) (37)

_____ 3. Weekends (38)

I. What are some of the most serious problems that may prevent you from attending an educational program? Check all that usually apply to you.

_____ 1. Program not available in local area. (39)
How far would you travel?_____miles (40-42)

_____ 2. Program not available at convenient time. (43)

_____ 3. Could not meet admission requirements. (44)

_____ 4. Costs of attending are too high. (45)

_____ 5. Present job does not allow time. (46)

_____ 6. Family obligations (e.g., child care) do not allow time. (47)

_____ 7. More training would not raise my income. (48)

_____ 8. Have no transportation. (49)

_____ 9. I never hear about programs being offered and I don't know where to find out. (50)

_____ 10. Other, explain: _____ (51)

_____

J. Would you like help in deciding what type of further education or job training you need? (52)

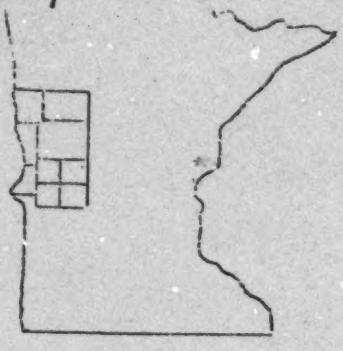
_____yes_____no

Thank you for your responses. Did other members of your household fill out their form? Please fold and return all the forms from your household in the enclosed envelope. No postage is required.

SECOND MAILING

West Central Regional Development Commission

Fergus Falls Community College
Administration Building



Fergus Falls, Minnesota 56537
Phone: 218-739-3356

June 3, 1976

Dear Becker County Resident:

We do need your help! Within the past two weeks, you received a letter from us with a set of questionnaires for completion by each person living in your household who is over high school age. We have not received any completed questionnaire from your household. Answers to the questionnaires will be used to plan adult educational programs for hobbies, special interests, or job related training which better meet the needs of your household and other county residents.

For your convenience, we have enclosed another set of questionnaires and a stamped, self-addressed envelope. Please take a few minutes to complete the questionnaires. If you have completed and returned the first questionnaires in the last few days, please disregard this letter.

We are extremely interested in adding your response to the responses of other residents of your community. If you have any questions about the forms, please call 739-3356 between 8:00 a.m. and 4:30 p.m. and ask for Karen Peterson or Bill Sharff. Thank you for your cooperation.

Sincerely,

Gordon Bopp

Gordon Bopp, Chairman
Regional Manpower Advisory Committee

Enclosures

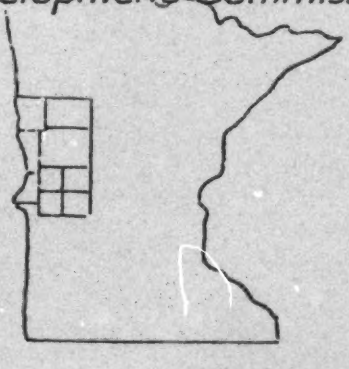
GB/ks

THIRD MAILING

West Central Regional Development Commission

Fergus Falls Community College
Administration Building

Fergus Falls, Minnesota 56537
Phone: 218-739-3356



June 21, 1976

Dear Area Resident:

You have recently received questionaires regarding your interest in more education for hobbies, special interests or job preparation. The colleges, vocational-technical institutes and high schools in this area need your help in determining what courses or programs would be of most interest and benefit to you and members of your household.

Because of the limited number of households being contacted, your response is essential. By filling out and returning the questionaire in the self-addressed stamped envelope you will be helping plan the education programs in your area.

Thank you for your help and cooperation.

Sincerely,

Karen A. Peterson

KAREN A. PETERSON
Project Director

Enclosures

APPENDIX VIII

EXPLANATION OF SUMMARY TABLES

EXPLANATION OF SUMMARY TABLES

This appendix provides an explanation of the summary tables which result from analysis of the data contained on the returned questionnaires.

AGE

The first table (see Table 4 and 24) presents the age distribution of the sample of the household and high school seniors. The ages are placed in seven age categories for households, and five categories for high school seniors. Repondents who completed the questionnaire but did not indicate their ages are placed in the "not reported" section beneath the age categorizations. For each age group in the household sample the number in the sample and the percentage of those reported are presented. The column entitled "number in sample", indicates the number of respondents falling within a particular age group. The column entitled "percent of reported" summarizes age groupings as a percentage of those respondents reporting their ages. In the household sample, two additional columns are included for comparing the age distribution of the sample and population. These columns show the number and percentage of the population falling into each age category. Note in these tables that only those responding to some part of the questionnaire are included; those who did not return a questionnaire or returned blank questionnaires are excluded.

SEX

These tables (see Tables 5 and 25) present the distribution of individuals of each sex and report the number of respondents completing part of the questionnaire but who did not indicate their sex. The "number in sample" column is a raw count of individuals in each category, while the other column report percentages based on the total number of respondents who indicated their sex. Two additional columns were added to the household table (Table 5) for the purpose of comparing the sample and population information. These columns noted the number and percentage of each sex category.

PRESENT OCCUPATION

These tables (see Tables 7 and 26) present information relative to the type of occupation held by the persons responding to the questionnaire. Occupations are classified into nine major groupings. For the major groupings, the number of respondents whose occupation was coded into the major grouping, and the percentages of total respondents reporting their occupation are reported. The categories used for this table are the same as those categories used by the U.S. Bureau of Census. The number of respondents not reporting that they were working is listed at the end of the occupational categories in the row labeled, "Not Reported".

EMPLOYMENT STATUS

The questionnaire requests respondents who are working to state their present occupation, and if not working or working less than desired to indicate reasons why. Those respondents stating their present occupation and not indicating reasons for working less than desired are considered as working as much as desired, and the numbers and percentages of this occurrance are presented in the first lines of Tables 6 and 27. Those respondents stating their present occupation, but also indicating reasons for working less time than desired, were considered as individuals working less than desired, and the number and percentages are presented in the second line of the Tables. Respondents who did not state an occupation, but indicated reasons for not working, were considered not working as in the third line of the Tables.

REASONS FOR NOT WORKING OR WORKING LESS THAN DESIRED

To be included in Table 28, respondents must have indicated which of four reasons accounted for their not working or working less time than desired. Since it is possible that the listed reasons do not encompass the universe of reasons, a section is provided on the questionnaire to state other reasons. The occurrance of other reasons is also summarized. Because respondents were asked to list as many reasons as possible, the "number in sample" column summarizes the number of individuals checking each category, and the percentages are based on the total number of individuals who responded to this question.

NEED FOR EDUCATION FOR HOBBIES OR SPECIAL INTERESTS

Respondents were asked to indicate on the questionnaire whether they want more education for hobbies or special interest. Tables 8 and 29 summarize the responses of this question for household and high school samples, respectively. As for previous tables, the number of respondents in the sample and the related percentages of total responses are presented for the "yes" and "no" responses. Also, as previously noted, the total "number in sample" includes only those respondents who completed this item on the questionnaire; excluded are those not returning questionnaires and those who returned questionnaires but did not complete this item.

A new feature of this summary table and the tables which follow, when compared to previous tables, is a column labled "Population Estimate". The numbers in this column represent an estimate of the number of the total population of the selected geographic area who would fit into each category of response (i.e., "yes" and "no" in this table). Estimates are made from the most conservative position relative to the number estimated to be interested in more education; this is accomplished by assuming that all individuals in the sample who did not return a questionnaire or did not complete the relevant question on the questionnaire would not be interested in more education. In these tables, all non-respondents were assumed to have indicated that "no" additional education for hobbies or special interests was desired. The basis for this conservative assumption is because it was felt that those who were interested in more education would take time to complete and return the questionnaire.

REASON FOR WANTING MORE EDUCATION (HOBBIES/SPECIAL INTERESTS)

Respondents were requested to check one of three reasons for needing education relating to hobbies and special interests, or to indicate that this type of education is not needed. Tables 9 and 30 summarize the number of responses, percentages of total responses, and population estimates for each reason listed. The population estimates in Table 9 are based on the projected total number of people in the region needing more education in hobbies and special interest; this projected total is the population estimation of the "yes" respondents in Table 8. In Table 30, the estimates are based on the projected number of high school seniors in the region needing this type of education. This projected number in the population estimate of Table 29.

PROGRAMS FOR HOBBIES AND SPECIAL INTERESTS(SAMPLE INFORMATION)

Programs for hobbies and special interests are categorized into seven program areas, and respondents choose the three program areas in which they are most interested. Tables 10 and 31 show a summary of the respondents' choices. For each program area, the number in the sample and its related percentage are indicated for the first, second, and third choices. The percentages for each choice are based on the total number of responses for that choice only.

The column entitled "Weight PCT" exhibits weighted percentages for each program area having taken into consideration varying levels of interest. The "number in sample" for each program area and the total number of each choice are the items that are weighed. The first, second, and third choices are given weights of three, two, and one, respectively. The sum of the weighed number for each choice in each program category is divided by the sum of the weighed totals and multiplied by one hundred to acquire the weight percentage.

PROGRAMS FOR HOBBIES AND SPECIAL INTEREST (POPULATION ESTIMATE)

Tables 11 and 32 are extensions of Table 8. For each program area, there are estimates of the actual number of people in the region who fall under each of the three levels of choice. These population estimates are based on the total number of people indicating a need for more education in the area of hobbies and special interests.

COURSES OF INTEREST FOR HOBBIES AND SPECIAL INTERESTS

The specific courses desired in each program area are exhibited in Tables 12 and 33. The number of responses, and the related percentages of total responses are reported for each major program area; but only the number of responses is reported for specific courses within program areas.

NEED FOR JOB TRAINING

Respondents were asked to indicate on the questionnaire whether they needed any additional job training for several different reasons. Respondents either selected a reason for more job training or indicated they did not want more education for job preparation. Those indicating a reason for more job training are categorized in the "yes" category in Tables 13 and 34. Those indicating no desire for more job training are categorized in the "no" category. The first two columns show the number of respondents and the percentage of total respondents in each category. The last column, "Population Estimate", provides an estimate of the number of individuals in the population who would fall in each category. Again, a conservative estimate is made of the number in the "yes" category by assuming all those who did not respond to the questionnaire or to this particular item were not interested in additional job training.

REASON FOR WANTING JOB TRAINING

Respondents were requested to check one of six reasons for wanting more job training, or to indicate that no job training is needed. Tables 14 and 35 summarize the number of respondents in the sample checking each reason for more training, and the percentages and population estimates calculated for each reason. The population estimates are based on the total number of people indicating a need for more job training as shown in the "yes" rows of Tables 14 and 35.

JOB GROUP FOR WHICH TRAINING IS WANTED (SAMPLE INFORMATION)

Jobs are categorized into 14 major job groups, and respondents chose the three major job groups for which training was desired. For each major job group, the number in the sample and its related percentage are indicated for the first, second, and third choices in Tables 15 and 36. The percentages for each choice are based on the total number of responses for that choice alone.

The column entitled "Weight PCT" exhibits a weighted percentage for each job group having taken into consideration varying levels of interest. The same weighing procedure is used here as in Tables 10 and 31.

JOB GROUP FOR WHICH TRAINING IS WANTED (POPULATION INFORMATION)

Exhibited in Tables 16 and 37 are estimates of the number of individuals in the total population who would fall under each of the three levels of choice.

JOBS FOR WHICH TRAINING IS WANTED

The specific jobs for which training is desired in each job group are shown in Tables 17 and 38. The number in the sample and the related percentages are reported for each major occupational category, but only the number

in the sample is reported for specific occupations within major occupational categories. The percentages in the "Percent of Reported" column are based only on those responding to this item on the questionnaire.

NEED FOR MORE EDUCATION

Tables 18 and 39 summarize the total interest in more education, combining the interest in more education for hobbies and special interests as well as for job training. Respondents are counted only once in this summary table even if they responded to both sections on interest in hobbies and special interest, and job training. Information is presented for the number of respondents indicating either or both types of interest, the percentage in each category and an estimate for the population.

TIME WHEN MORE EDUCATION COULD BE ATTENDED

Tables 19 and 40 summarize the times when respondents can be available for more education. For each time or time combination, the number in the sample for whom this time is convenient is indicated together with the related percentage and population estimate. Population estimates are based on the estimated number of the population who would respond "yes" to interest in more education as shown in Tables 18 and 39.

HINDRANCES TO ATTENDING EDUCATIONAL PROGRAMS

From the listed nine hindrances to attending educational programs, the respondents were requested to check as many as apply to their situation. In Tables 20 and 41, the number of times each hindrance is checked is indicated together with the related percentage and population estimate. Their percentages are based on the total number of respondents indicating at least one hindrance to attending more educational programs. Population estimates are based on the population estimate for the "yes" category in Tables 18 and 39.

DISTANCE WILLING TO TRAVEL FOR THOSE WITH TRANSPORTATION HINDRANCE

Tables 21 and 42 have five distance categories which summarize the distances respondents are willing to travel to participate in an educational program. For each distance category, the number of persons in the sample willing to travel that distance together with the related percentage of total responses is provided.

HELP NEEDED TO DETERMINE EDUCATION NEEDED

Respondents were asked to indicate on the questionnaire whether they need help in determining their educational need. The number of respondents in the sample and the related percentages and population estimates are shown for the "yes" and "no" responses in Tables 22 and 43. The population estimate assumes that individuals not returning a questionnaire and those not completing this item would respond "no".

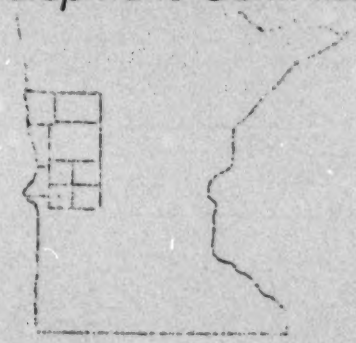
APPENDIX IX

VALIDITY QUESTIONNAIRE AND COVER LETTER

West Central Regional Development Commission

Fergus Falls Community College
Administration Building

Fergus Falls, Minnesota 56537
Phone: 218-739-3356



Dear Area Resident:

In the past few weeks, members of your household returned our survey asking about your interest in more education for hobbies, special interests and job or employment related training. We have enclosed a copy of the survey form to help you remember what it was about.

On the survey form, members of your household indicated the educational programs of high interest to them. We are now contacting a small group of households to find out the actual level of interest for the educational programs which were chosen. Your responses will help us to know how important each choice was to you.

With this letter, we have enclosed a one-page form for each member of your household who indicated an interest in a particular education program. You can identify which form belongs to each member of your household by the age, and sex information which is filled out on the form. For each member of the household, we also filled out what was indicated as the first, second, and third choices of education programs for hobbies and special interests and for job training. For each of the choices filled out on the form, please indicate your level of interest in attending an educational program of this kind.

When each of the enclosed "Level of Interest" forms has been completed, please return them in the stamped, self-addressed envelope. We would appreciate your returning the forms in the next few days.

Again, thank you for helping us to identify educational programs of high interest to residents of your area. If you have questions about our form, please call me at 739-3356 between 8:00 A.M. and 4:30 P.M.

Sincerely,

Karen Peterson

Karen Peterson
Project Director

YOUR LEVEL OF INTEREST ☐☐☐☐☐☐☐☐☐

This form should be completed by the member of your household with the following age, and sex.

Age _____ Sex _____

A. In our interest survey, you indicated the following choices for educational programs in the area of hobbies and special interest. *Check all the statements which fit your level of interest for each choice.*

	1st Choice	2nd Choice	3rd Choice
Program Area			
Specific Interest			
1. I would be willing to consider a course or program of this kind, but don't send me specific information at this time.	☐	☐	☐
2. I would be willing to be sent information about available courses or programs.	☐	☐	☐
3. I would be willing to list my name as a potential student.	☐	☐	☐
4. I would be willing to attend one meeting with other interested individuals to help plan the course or program.	☐	☐	☐
5. I would be willing to recruit others to enable the class to be offered.	☐	☐	☐
6. I would be willing to secure a place in a course of this kind by paying a small fee now which will not be refunded.	☐	☐	☐

B. You also indicated three choices for educational programs in the area of job training. *Check all the statements which best fit your level of interest for each choice.*

	1st Choice	2nd Choice	3rd Choice
Job Area			
Specific Job			
1. I would be willing to consider a course or program of this kind, but don't send me specific information at this time.	☐	☐	☐
2. I would be willing to be sent information about available courses or programs.	☐	☐	☐
3. I would be willing to list my name as a potential student.	☐	☐	☐
4. I would be willing to attend one meeting with other interested individuals to help plan the course or program.	☐	☐	☐
5. I would be willing to recruit others to enable the class to be offered.	☐	☐	☐
6. I would be willing to secure a place in a course of this kind by paying a small fee now which will not be refunded.	☐	☐	☐

APPENDIX X

RELIABILITY OF POPULATION ESTIMATES

Standard error is a measure of the variation in estimates resulting from sampling rather than asking the whole population. The chances are 68 out of 100 that error due to sampling (difference between the estimate based on the sample and the true population value) is less than the standard error. For example, if the estimate is 200 persons and the standard error is 10, then the chances are 68 out of 100 that the difference between the estimated based on the sample and the true population value is less than 10. The chances are 95 out of 100 that the difference is less than twice the standard error (20 in the previous example) and about 99 out of 100 that it is less than 2 1/2 times the standard error (25 in the previous example).

It would be too costly to prepare estimates of standard error for each of the estimates made in the following tables. Rather, a table which should be interpreted as providing an indication of the magnitude of the standard errors rather than a precise standard error for any specific item is presented. The reliability of an estimated number depends on the size of the estimate, size of the population, and size of sample. In this study, the population was approximately 115,500 persons for residents over high school age (households) and 4,000 for high school seniors. The standard error associated with various size estimates for this population is shown in the table below. These estimates assume that a simple random sample of the population was made in order to obtain the estimates.

STANDARD ERROR OF POPULATION ESTIMATES

Size of Estimate	Standard Error	
	Households	High School Seniors
20	19	11
50	31	17
100	44	24
250	69	37
500	97	50
750	119	60
1,000	137	66
1,500	168	74
2,000	194	76
3,000	236	54
4,000	271	--
5,000	302	--
7,500	366	--
10,000	417	--
15,000	499	--
20,000	561	--

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